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February 26, 2004

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

RE: IB Docket No. 02-364 Ex Parte Notice

Dear Ms. Dortch:

On February 25, 2004, William F. Adler, Vice President of Legal and Regulatory Affairs for Globalstar, L.P. ("GLP"), Paul Monte, GLP's Director of Systems and Regulatory Engineering, and the undersigned participated in a meeting with representatives of the International Bureau, Wireless Telecommunications Bureau and Office of Engineering & Technology to discuss GLP's use of and need for S-band spectrum in the Globalstar Mobile Satellite Service ("MSS") system.

During this meeting, GLP was asked to explain how it uses and plans in the future to use the S-band (2483.5 - 2500 MHz) spectrum authorized for use by the Globalstar MSS system. GLP stated that it requires a minimum of 10.27 MHz at L-band and a minimum of 13.73 MHz at S-band (13.905 MHz if spectrum were to be reallocated from the upper edge only) in order to have the capability to serve current and future subscribers in the United States and to grow its business sufficiently to remain an ongoing business concern. This is the amount of spectrum upon which Globalstar's financial forecasts have been based and upon which Thermo Capital Partners, L.L.C., which purchased GLP's assets in bankruptcy, relied in making its offer. GLP pointed out that it has no license for any other MSS spectrum and that, consequently, its existing 1.6/2.4 GHz Big LEO spectrum would have to be sufficient into and beyond a second generation satellite constellation.

GLP stated that the Globalstar system is currently using 7.5 MHz of S-band spectrum in the United States and its possessions to provide existing voice/data, aviation and maritime services. Based on current demand and increases in demand over the past two years, the system's S-band spectrum usage requirements are expected to grow to 10 MHz this summer as subscribers increase and minutes of use

on the system increase, and to 12.5 MHz by March 2005, and to 13.73 MHz within the next two years.

The following questions were posed by Commission staff and answered during the meeting:

Q1 (a) How would the Globalstar system be affected if a sub-band of the downlink band 2483.5-2500 MHz were reallocated to another service?

The Big LEO R&O stated that the Commission would consider redesignating 3.1 MHz of the Big LEO uplink from CDMA to TDMA if only one CDMA MSS system was implemented. According to Globalstar there is a ratio of 1:1.4 in the capacity per MHz between the uplink and downlink of the CDMA MSS system. How would the Globalstar system be affected if (1.4 x 3.1 MHz) = 4.6 MHz were reallocated to another service? Would the placement of a reallocated band sub-band within the downlink MHz band matter?

Response: If 4.6 MHz of S-band spectrum is reallocated, service quality will start to be affected negatively in the first or second quarter of 2005 based expected use at that time. The impact could be blocked subscriber call attempts due to spectrum limitations.

Globalstar receives interference in both the high part of the S-band and the low part so the placement of another service, in theory, does matter. The interference at the upper edge of the S-band is worse.

(b) How would the Globalstar system be affected if 5 MHz were reallocated to another service? Would the placement of a reallocated 5 MHz sub-band within the downlink band matter?

Response: Because of Globalstar's 1.23 MHz carriers and because Globalstar only requires a 100 kHz buffer at each end of the S-band, there is no difference between 4.6 MHz and 5 MHz. There is currently 135 kHz not being used at the top end of the S-band and 175 kHz not being used at the bottom end. (Maximum usage of the S-band is 16.19 MHz of spectrum.) From there, reductions of multiples of 1.23 MHz make a difference. As noted above, there is interference at both the top and bottom of the S-band.

(c) How would the Globalstar system be affected if 10 MHz were reallocated to another service? Would the placement of a reallocated 10 MHz sub-band within the downlink band matter?

Response: This would have a severe effect on the quality of service to current customers and would adversely affect the economics of Globalstar's business.

Q2 If a sub-band of the downlink band were reallocated and, if necessary, the ATC allocation moved into the remaining MSS band. could ATC be implemented?

Response: If 4.6 MHz or more of the downlink were reallocated to another service, leaving 10-12 MHz or less for MSS, Globalstar would probably not be able to deploy ATC. As indicated above, for MSS services, Globalstar expects to require at least 10.5 MHz by March 2005. Accordingly, there would not be enough spectrum for Globalstar to allocate to an ATC service and maintain an acceptable quality of service for satellite customers.[1]

Q3 Use and assignment of channels within the Globalstar system:

(a) Is there a fixed relation between the center frequencies of the uplink and downlink channels used by a user terminal?

Response: There is no relationship between the center frequencies of the uplink and downlink channels. The uplink and downlink channels are independent from one another.

The Globalstar center frequencies are fixed both in the uplink and the downlink. Changing the center frequencies to accommodate a reallocation of S-band spectrum would require replacing all the currently deployed METs and replacing hardware at the Globalstar gateways, obviously at substantial cost to Globalstar.

(b) How are uplink and downlink channels assigned?

Response: The channels are assigned on a fixed basis to each gateway. If a gateway is assigned more than one frequency, each call is randomly assigned to a specific uplink and downlink channel. The channel used by a MET is also assigned randomly.

(c) How does the system react to localized interference on a downlink channel?

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[1] For further information on how Globalstar would implement ATC with the current spectrum assignments, see GLP's "Comments" filed in IB Docket 01-185 on October 22, 2001, the "Response to FCC Public Notice 02-554" filed on March 22, 2002, and the "Ex Parte Presentation" filed on June 27, 2002.

Response: The system does not react to localized interference. Localized interference creates a geographical zone where Globalstar phones have reduced quality or no service availability. Interference into a channel with overhead information would disrupt call set up and create a Globalstar no-use zone, while interference into a transmission channel would reduce service quality and/or cause a call to drop.

Q4 How would the introduction of point-to-point or point-to-multipoint transmitters sharing portions of the 2483.5-2500 MHz band affect the existing Globalstar user terminals?

Response: Introduction of the specified transmitters would create geographic zones where Globalstar phones would have reduced quality or no service depending upon the distance to the transmitter and the direction of the antenna gain of the transmitter. A point-to-multipoint service, such as MDS, would have a much more severe impact because the typical omnidirectional transmitter would create a large circular or polygonal footprint within which a Globalstar phone could not operate. Given the size of Globalstar beams, a single terrestrial transmitter sharing S-band could interfere with a Globalstar user terminal within approximately 10 miles. Also note that a Globalstar ATC system could not share frequencies with another terrestrial service.

Q5 Describe any limitations on which downlink channels are used in various parts of the world that would affect the system operations if 10 MHz of the downlink were reallocated? 5 MHz? 4.6 MHz? Would the placement of a reallocated sub-band within the 2483.5-2500 MHz band matter given those described limitations?

Response: Globalstar's S-band authorization extends only up to 2498 MHz in all of Europe (with the exception of Iceland where Globalstar has a license for the full 16.5 MHz) and only up to 2495 MHz in the Russian Republic. The only other international restriction is the PFD limit in the ITU's Radio Regulations. As stated above, Globalstar would have difficulty serving its current subscriber base in the United States if 10 MHz of S-band spectrum were reallocated.

The S-band PFD limits constrain the number of subscribers that can be served in a given bandwidth. The most limiting PFD is the limit from 0 to 5 degrees elevation angle, which is more stringent that the value at higher

angles of elevation.[2] As an example of the impact of PFD limits, if the PFD limits were constant across elevation angles and set to the current value at 25 to 90 degrees elevation, Globalstar might be able to reduce the above-stated S-band requirements by, at most, 2.46 MHz. However, Globalstar does have frequency allocation constraints as well. The frequency allocation constraints might limit the reduction to 1.23 MHz.

The United States adopted PFD limits established by the ITU Radio Regulations, which are also in effect in Canada and Mexico. Accordingly, Globalstar might not be able to take advantage of less stringent PFD limits in the United States for transmission in beams that would also transmit into Canada and Mexico.

In response to other questions during the meeting, GLP pointed out that the Globalstar system was constructed and launched based on the frequencies made available to CDMA Big LEO systems, which Globalstar accepted with the anticipated sharing of the 16.5 MHz of S-band spectrum by up to four CDMA MSS systems. Unlike terrestrial cellular systems, it is not possible to modify the satellite "cells" to improve spectrum reuse until the next generation system is launched. And, it is not possible to launch the next generation system unless the current satellite system can obtain sufficient revenues over the lifetime of the satellite constellation to finance, or obtain financing, for construction and launch of the next generation system. Accordingly, the available spectrum is the economic base for the current system and the next generation system, and the projections for future growth of subscribers and usages are an integral component of the current financial viability of the system. There are features of the terrestrial infrastructure that can be modified to increase system capacity and extract more channels from the satellites as demand warrants, but those modifications have already been planned and are built into the economic projections for subscriber growth and spectrum usage.

Currently, the largest markets for Globalstar services are the United States, Canada and Russia. The United States accounts for about 30,000 of the approximately 110,000 subscribers currently on the Globalstar system. Globalstar USA's minutes of use grew by 125% from year-end 2002 to year-end 2003 even though Globalstar was in bankruptcy, which severely constrained the sales and marketing of service and products. In addition to continuing month-to-month increases in subscribers and minutes of use, the average length of calls is also increasing.

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[2] See Amendment of Section 2.106 of the Commission's Rules to Allocate the 1610-1626.5 MHz and the 2483.5-2500 MHz Bands for Use by the Mobile Satellite Service, 9 FCC Rcd 536, 540-541 (1994).

GLP, Globalstar USA, LLC, and L/Q Licensee, Inc., have explained in their Joint Comments (filed July 11, 2003) and Joint Reply Comments (filed July 25, 2003) in this docket why it is essential for the Globalstar system to retain access to the current CDMA spectrum assignments at L-band and S-band. The questions raised and answered during this meeting are fully consistent with the spectrum requirements explained in those pleadings.

Pursuant to Section 1.1206(b)(2) of the Commission's Rules, this letter is being filed electronically over the Commission's Electronic Comment Filing System.

Respectfully submitted,

William D. Wallace