Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

RECEIVED

NOV 1 9 1998

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of	)	
	)	
Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use	)	IB Docket No. 98-172 RM-9005 RM-9118

To: The Commission

COMMENTS OF IRIDIUM LLC

Iridium LLC ("Iridium") hereby respectfully submits its comments in the above-captioned proceeding in response to the Commission's Notice of Proposed Rule Making ("Notice") released on September 18, 1998.[1] In its Notice, the Commission seeks comments, among other things, on a proposal to create blanket satellite earth station licensing procedures in bands that are currently designated or proposed for primary Geostationary Orbit Fixed Satellite Service (GSO/FSS) use, specifically the 19.7-20.2 GHz, 28.35-28.96 GHz, 29.5-30 GHz and 18.3-18.55 GHz bands. The Commission also seeks comments on a proposal to blanket license Non-Geostationary Orbit Fixed Satellite Service (NGSO/ FSS) earth stations in the 18.8-19.3 GHz and 28.6-29.1 GHz bands. Iridium limits its comments to these blanket licensing proposals.

No. of Copies rec'd 0
List ABCDE

[1] 63 Fed. Reg. 54,100 (October 8, 1998). The Commission extended the pleading cycle until November 19th for comments and December 21st for reply comments by Order of the International Bureau Chief on November 2, 1998 (DA 98-2231).

Iridium fully supports the Commission's efforts to create blanket licensing procedures in satellite bands where to do so would be consistent with sound technical principles and permits all users of the bands to benefit. Blanket licensing is at the core of satellite industry efforts to develop both mobile and fixed earth station products with direct consumer applications. Consumer- friendly earth terminals, now as small in size as the pager or cellular phone-sized products offered by Iridium, will bring the promise of Global Mobile Personal Communications by Satellite (GMPCS) services to reality. The Commission has already created blanket licensing procedures in bands including those designated for Big and Little LEO MSS operations. Extension of this blanket licensing procedure to primary FSS bands is entirely in keeping with the creation of broadband FSS GMPCS services.

At the same time, Iridium urges the Commission not to extend blanket licensing procedures into bands where the fixed satellite service (either GSO or NGSO) does not now have sole primary status. In particular, the Commission should adopt its proposal not to apply blanket licensing in bands where fixed-satellite service is either co-primary or secondary to Mobile Satellite Service feeder link (MSS/FL) operations. The Commission has correctly recognized the crucial nature of these feeder link bands for the control of MSS satellite networks that will bring mobile satellite service to consumers using NGSO satellites. The band segmentation and sharing plan adopted in the 28 GHz First Report and Order,[2] already an imperfect means of sharing between MSS/FL

---

[2] See Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesigned the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution

and GSO/FSS operations in the 29.25-29.5 GHz bands, cannot support ubiquitous operations by FSS blanket licensees.

In its Notice, the Commission concludes that blanket licensing cannot be implemented in the 29.25-29.5 GHz band shared on a co-primary basis with MSS feeder link operations.[3] The Commission correctly notes that coordination between ubiquitous earth stations and future feeder link operations raises issues beyond those raised by intra-GSO/FSS sharing. The Commission also correctly recognizes that it is important to reserve feeder link spectrum for the expansion of current MSS networks or the creation of new ones. Introducing blanket licensing of consumer handsets into this band would make protection of the fixed feeder link sites all but impossible. As Iridium stated in response to the FSS Coalition's petition for Rulemaking:

> While the Petitioners have recognized an obligation to coordinate or demonstrate successful coordination with current NGSO/MSS licensees in the 29.25-29.5 GHz Band, the Petition is silent as to how coordination could be accomplished with any future NGSO/MSS system that intends or seeks to use 29.25-29.5 GHz for its feeder links. Indeed, coordination between co-primary NGSO/MSS feeder links and blanket-licensed GSO/FSS earth stations would appear to be impossible. Thus, if the Commission permits blanket licensing of the GSO/FSS terminals in this band, use of this band will not be feasible for NGSO/MSS feeder links, despite the co-primary status of NGSO/MSS feeder links with GSO/FSS.[4]

In this regard, the Commission also seeks comments on its current procedure for coordination between MSS/FL and GSO/FSS operations in this band as well as

---

Service and for Fixed Satellite Services, First Report and Order and Fourth Notice of Proposed Rulemaking, 11 FCC 190005 (1996) ("28 GHz First Report and Order").

[3] See Notice at ¶ 63.

[4] Comments of Iridium in RM No. 9005 at 2-3, September 24, 1997.

possible means of sharing that might allow for blanket licensing.[5] Motorola, as licensee of the Iridium system, has opposed the Commission's procedure for coordination between MSS feeder link and FSS operations as set out at Section 25.258(c) of the rules.[6] The Commission has yet to act upon Motorola's Petition for Reconsideration and Iridium will not restate Motorola's concerns here. It is clear, however, that this coordination procedure, if it is to work at all, may only do so in an environment of limited fixed Earth terminals. For example, the requirement for NGSO/MSS satellites to maintain repeating ground tracks across the surface of the Earth would provide no protection to thousands of consumer terminals. Nor would the obligation for GSO/FSS operations to use frequency/polarization in the vicinity of NGSO feeder link terminals have any value in an environment where customers can purchase mass-produced terminals and transport them to any location.

The Commission rightly concluded that blanket licensing is not viable for shared MSS/FL bands when it decided that LMDS would be co-primary with MSS feeder links at 29.1-29.25 GHz. There, the Commission prohibited the use of subscriber-to-hub links (effectively banning this band's use for customer operations) entirely due to the obvious inability to police operations by consumers in and around the needed quiet zones established for MSS feeder link Earth stations.[7] The Commission should maintain this prohibition against ubiquitous use of spectrum in the 29.25-29.5 GHz band

---

[5] Notice at ¶ 63.

[6] Motorola Satellite Communications, Inc. Petition for Partial Reconsideration in CC Docket 92-297, September 27, 1996; Consolidated Reply, November 4, 1996.

[7] See 28 GHz First Report and Order at ¶¶ 67-71.

to ensure that the essential coordination requirements committed to by satellite operators can be effectively implemented. Blanket licensing, and the resulting uninhibited movement of consumer terminals, is inconsistent with co-primary sharing arrangements.

Iridium supports the Commission's efforts to promote GMPCS operations through the extension of blanket licensing in bands where FSS enjoys sole primary status. The Commission should not, however, adopt blanket licensing in the 29.25-29.5 GHz band because of the intricate coordination requirements needed between fixed MSS feeder link and FSS Earth station operations.

Respectfully submitted,

Iridium LLC

By: Patricia A. Mahoney
Assistant General Counsel
Regulatory and Trade Policy

Brent H. Weingardt
Counsel
Regulatory and Trade Policy

Iridium LLC
1575 Eye Street, N.W.
Washington, D.C. 20005
(202) 408-3800

November 19, 1998