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Before the FEDERAL COMMUNICATIONS COMMISSION EDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

OFFICE OF SECRETARY

In re)
Application of Hughes Communications Galaxy, Inc.,)) File Nos. 174-181-SAT-P/LA-95)
For Authority to Construct, Launch, and Operate Galaxy/Spaceway, a Hybrid	Received
Ka/Ku band Satellite System To: Chief, International Bureau	UAN (76 1996)

Satellite Engineering Branch International Bureau

PETITION TO DENY

PanAmSat Corporation ("PanAmSat"), by its attorneys, hereby submits this petition to deny the above-referenced application (the "Application") of Hughes Communications Galaxy, Inc. ("Hughes"). The Application requests authority to construct, launch, and operate a hybrid satellite system consisting of 20 satellites, utilizing both Ka-band FSS and Ku-band BSS frequencies at 15 orbital locations.1

PanAmSat opposes the Application on two grounds. First, PanAmSat proposes that the Commission eliminate excess concentration in the domestic satellite industry by capping at five (5) the number of fixed satellite orbital locations that may be held by any single entity and its affiliates. To the extent that grant of the Application cannot be reconciled with this cap, the Commission should deny the Hughes Application. Second, grant of Hughes' Application would further entrench Hughes' dominant position in the domestic satellite market and would pose a serious threat to the growth and development of competition in the international satellite services market. Hughes' vertical integration exacerbates this risk. For all of these reasons, Hughes' Application should be denied.

¹ See Public Notice, Ka-Band Satellite Applications Accepted for Filing (Dec. 1, 1995).

I. The Commission Should Take Measures To Ensure That Multiple Competitors and New Entrants Have Access To Orbital Locations In The Domestic Arc.

A. The Domestic Satellite Industry Is Excessively Concentrated.

Although the FCC's "open skies" domestic satellite policy was an early success of the era of deregulation, the domestic satellite market of the 1990s has suffered from extreme concentration. This concentration results from the inherent scarcity of orbital and spectrum resources and because of FCC policies that inadvertently have created barriers to the entry of new competitors, including an unnecessarily stringent financial qualification requirement that favors only major industrial concerns.²

This has led to a domestic satellite market in which two companies — Hughes and GE American Communications, Inc. ("GE Americom") — control the vast majority of orbital locations and in which there are few, if any, available opportunities for new entrants to provide C-band and Ku-band fixed satellite services. Currently, there is a "dearth of prime orbital slots over the United States," and the situation is likely to get worse as demand for the scarce orbital resource increases.³ As a result, the Commission must change its satellite licensing policies if it is to re-establish competition as the key to providing consumer benefits in the domestic satellite industry.

Hughes is the prime example of the overconcentration in the domestic satellite industry. The usable arc for domestic satellites runs from 64° W.L. to 105° W.L., and from 121° W.L. to 135° W.L. (for 12/14 GHz

² In theory, the Commission now could use its auction authority in lieu of financial qualifications in an effort to avoid mutual exclusivity. Ironically, however, competitive bidding would be as much of an obstacle to new entrants as is the stringent financial qualification test. In each case, only the most well-established companies need apply. There are compelling public policy reasons, moreover, for declining to use competitive bidding procedures for most satellite services. See Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate 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 Service and for Fixed Satellite Services and Suite 12 Group Petition for Pioneer's Preference, CC-92-297, PP-22, Comments of PanAmSat (filed Sept. 7, 1995).

³ Satellite News, Oct. 17, 1994, at 3; cf. In re Orbital Communications Corporation, 9 FCC Rcd 6476, 6481 (1994) (noting scarcity of geostationary orbital locations).

satellites) or 143° W.L. (for 4/6 GHz satellites).⁴ Accordingly, assuming 2° spacing between satellites, there are, approximately, only 31 usable domestic arc orbital locations for C- and Ku-band satellites, and even fewer positions which can support full 50 state coverage. Within the domestic arc, Hughes has an existing satellite or a reservation in at least eleven orbital locations, a reservation through AMSC (of which Hughes is the largest shareholder) for three additional locations, an STA to operate Brazilsat to provide U.S. domestic satellite services, and a prime DBS orbital location and 27 assigned channels out of 98 for DBS satellites through its DirecTV affiliate.⁵

Hughes in addition has the lion's share of the world's satellite and satellite hardware manufacturing market and, through its Hughes Network Services affiliate, it dominates the market for VSAT services and hardware with 55 percent of the market — the next closest competitor, GE/Gilat, has only 12 percent.⁶ Hughes also is an equity participant in, and satellite supplier to, I-CO Global Communications Limited, which is the Inmarsat affiliate that will provide Inmarsat land mobile services. Finally, in the instant Application, Hughes has applied for authority to operate 20 more satellites at 15 orbital locations.

Hughes, in short, is dominant in every aspect of the satellite hardware and services industries.⁷ PanAmSat urges the Commission to

[Hughes Space and Communications Company ("HSC")] and [Hughes Communications Group ("HCG")] are leading companies in the field of satellite communications. HSC is a preeminent manufacturer of communications satellites that provide a wide range of commercial and military services, both domestic and international. Over 100 HAC communications satellites have been launched to date, approximately 50 are now in service, and 25 are expected to be launched in the next two years.

HCG and its affiliates operate the largest fleet of domestic communications satellites: the in-orbit Galaxy I-R, III, V-W, and VI C band satellites; the in-orbit SBS-4, SBS-5 and SBS-6 Ku band satellites; and the in-orbit hybrid (combined C and Ku band) Galaxy IV(H) and VII(H) satellites. An HCG affiliate operates the fleet

⁴ <u>See Assignment of Orbital Locations to Space Stations in the Domestic Fixed Satellite Service</u>, 3 FCC Rcd 6972 (1988).

⁵ <u>See In re Revision of Rules and Policies for the Direct broadcast Satellite Service</u>, IB Docket No. 95-168, PP Docket No. 93-253, Notice of Proposed Rulemaking (rel. Oct. 30, 1995) at n.75.

⁶ See Via Satellite, December 1995, at 22.

⁷ In comments recently submitted In the Matter of Preparation for International Telecommunications Union World Radiocommunications Conferences, IC Docket No. 94-31 (July 15, 1994) at 1-2, Hughes described its activities as follows:

take the affirmative steps described below to limit the ability of Hughes to leverage that dominant position to the detriment of competitors and the public.

B. The Commission Should Limit The Number Of Orbital Locations That Any One Entity Can Control So As To Make Room For New Entrants.

As described above, Hughes holds interests in so many orbital locations that it, in combination with current market conditions, has the power to exclude competitors and distort the market. Hughes and GE Americom collectively control roughly 23 of these 31 positions. AT&T is able to provide only limited competition from three in-orbit satellites, two of which (Telstar 302 and 303) are inclined orbit satellites. If other countries obtain additional positions within the U.S. domestic arc, as anticipated, it likely will be impractical, if not impossible, for new entrants and separate system licensees to provide competitive domestic service. The Commission should, therefore, take measures now to ensure that entities other than Hughes and GE Americom have immediate access to orbital locations in the US domestic arc.

The effects of over-concentration in the domestic satellite market are shown dramatically by the current severe shortage of domestic satellite C-and Ku-band capacity,⁸ a shortage that has resulted in sharply increased rates for domestic C-band and Ku-band transponder capacity. Although the C-band shortage is particularly severe, there is also a serious shortage of Ku-band capacity, as reflected in the announcement by Hughes to charge a flat fee of \$1,000 per hour for C- and Ku-band occasional use service.⁹ Industry

of Leasat satellites that provides essential worldwide communications services to the United States Navy.

Within the last year, HCG and its affiliate, DIRECTV, Inc., have launched and begun operation of a high power direct broadcast satellite that provides (along with the United States Satellite Broadcasting Company) the first high-power DBS service in the United States. A second DBS satellite is scheduled for launch within the next two weeks. HCG is the largest shareholder in AMSC, the permittee for a geostationary MSS satellite that will provide services in the United States. In addition, HCG is an applicant for a Ka band "Spaceway" satellite system that will bring essential telecommunications services to underserved areas.

See, e.g., Communications Daily, March 8, 1995, at 7; Space News, November 7, 1994, at 1, 20.
 Broadcasting & Cable, April 24, 1995, at 47.

observers said the move, made possible by the domestic capacity shortage, represents a doubling, and in some cases a quadrupling, of previous prices. Price gouging by domestic satellite providers has priced educational and non-profit satellite users out of the market, prompting the National Education Telecommunications Organization and EDSAT to warn that "many, many small independent education providers [will] go dark and out of business."

One immediate step the Commission can take to ensure the fair and equitable distribution of orbital slots is to cap the number of orbital locations in which any single satellite operator may hold an interest. Indeed, Hughes itself advocated such a cap when it was a new entrant in the market. If the domestic satellite market is to become competitive, international satellite providers and other new entrants must have reasonable access to domestic orbital locations.

Limiting the amount of a scarce public resource that any one entity can control in order to preserve a competitive market is fully consistent with existing Commission policies. As the Commission noted in its recent DBS Notice of Proposed Rulemaking, "[w]e have adopted limits on spectrum aggregation to promote diversity and competition in other services in which excessive aggregation by licensees could preclude entry by other service providers and thus confer excessive market power on incumbents."¹³

In accordance with this principle, PanAmSat urges the Commission to limit licensees and their affiliates to five (5) domestic arc fixed satellite service orbital locations. This number of orbital locations strikes the proper balance between preserving the Commission's long-standing

¹⁰ Id. at 47-48; see also Via Satellite, November 1995, at 14-21.

^{11 &}lt;u>Telecommunications Report, March</u> 20, 1995, at 37.

¹² See, e.g., In re Western Union Telegraph Co. et al., File No. 1077-DSS-P/LA-80, Comments of Hughes Communications, Inc. (filed June 11, 1980) at 5, 7-8 (carriers should be limited to "three orbital assignments each").

In re Revision of Rules and Policies for the Direct broadcast Satellite Service, IB Docket No. 95-168, PP Docket No. 93-253, Notice of Proposed Rulemaking (rel. Oct. 30, 1995) at ¶ 33.

This five location cap would apply to all FSS satellites regardless of the frequency on which such satellites are transmitting. Thus, an entity that sought to operate five C-/Ku-band hybrid satellites and three Ka-band satellites in the domestic arc would be required to locate these eight satellites in no more than five orbital locations.

competitive entry policies and rewarding existing operators for the substantial financial risks and significant investments (both by the operators and their respective users) associated with the establishment and operation of existing satellite networks.

As noted above, assuming 2° spacing, there are approximately 31 orbital locations in the domestic arc. Allowing any one licensee to control five orbital locations effectively would allocate approximately half of these positions to the existing three operators. The balance of the domestic arc orbital locations would be available for assignment to new entrants, although the presence of foreign-licensed systems makes it likely that the number of positions available to U.S. licensees could be somewhat less than fifteen.

It is important to emphasize that access to these orbital locations is the only means that separate system providers will have to provide domestic service. As the Commission has recognized, separate system operators cannot offer effective domestic satellite services from their international orbital locations. On the other hand, domestic satellite operators are capable of providing, from a single satellite, international service fully-interconnected with the CONUS and, from a number of locations, full fifty-state coverage. This difference in capabilities ensures that domestic operators' market position in domestic services is protected so long as they can exclude others from domestic orbital locations.

In the Application, Hughes proposes the allocation of three domestic Ka-band orbital locations — 67° W.L., 99° W.L., and 101° W.L. — for Hughes satellites. Hughes currently operates FSS and BSS satellites at two of these locations. As described above, however, Hughes already has an interest in at least eleven domestic orbital locations; more if its DirecTV and AMSC slots are counted. Thus, if the Commission adopts the orbital location cap

 $^{^{15}}$ Amendment of the Commission's Regulatory Policies Governing Domestic Fixed Satellites and Separate International Satellite Systems, Notice of Proposed Rulemaking, IB Docket No. 95-41 (rel. April 25, 1995) \P 22.

once proposed by Hughes and now advocated by PanAmSat, Hughes will be required to relinquish several of its orbital locations.¹⁶

Because it is premature to anticipate which orbital locations Hughes will be permitted to retain if a cap is implemented, the Commission should not at this time allocate to Hughes any of the three domestic arc orbital positions proposed in the Application for Hughes spacecraft. Instead, to the extent that a rulemaking proceeding is required to change domestic satellite licensing policies and grant of the Application would conflict with the proposed cap on orbital positions, the Commission should withhold action on or deny the Hughes Application.

Rather than commit additional orbital locations in the Ka-band to the dominant domestic satellite operator — Hughes — the Commission should allocate the orbital locations sought by Hughes to new competitors in the domestic market. In this way, the Commission would help to ensure that new entrants have a realistic opportunity to compete and thereby loosen the competitive stranglehold that Hughes has on that market.

II. The Proposed Expansion of Hughes' Market Position Into International Services Would Undermine Growing Competition Both In The Domestic And International Satellite Markets.

The Hughes Application also proposes a vast array of new international satellites. In combination with Hughes' dominance in the domestic market and its vertically integrated position within the satellite industry, this proposed expansion poses a threat to competition both in the domestic and international satellite services markets. In order to avoid a competitive imbalance that may fundamentally distort the satellite market for years to come, the Commission should deny the Application.

The competitive risks presented by the Hughes Application are manifest. First, Hughes' proposed international service gives rise to concerns relating to cross-subsidies. As described above, Hughes' dominant position in the domestic market, in which capacity shortages and price increases have been well documented, will allow it to cross-subsidize its

¹⁶ Existing satellites located at orbital positions in excess of the five orbital location cap should be grandfathered for the life of the satellite at such location. However, as those satellites die, the orbital locations that they occupy should be made available to new entrants.

entry into international satellite services. If it were to do so, Hughes could undercut separate system operators with anticompetitive and predatory prices and stifle the growth of competition in that market.

Second, as noted above, Hughes enjoys an unfair advantage *vis-a-vis* separate system operators because of its ability to provide international service fully interconnected with the CONUS from a single satellite and, from a number of locations, full fifty-state coverage. Grant of the Application would allow Hughes to engage in the anticompetitive "tying" of domestic satellite services to international services and vice versa. This practice, which would be facilitated by the fact that the same customers acquire both domestic and international satellite services, would undermine competition in both the domestic and international satellite markets: Satellite operators which could not offer both domestic and international services would be unable to compete for such customers.

Finally, Hughes' participation in nearly every facet of the satellite industry allows it additional leeway to engage in unfair and anticompetitive practices. For example, in the ordinary course of its business as a satellite manufacturer, Hughes routinely learns of the proprietary business plans of its customers, including separate system operators that acquire Hughes satellites to provide international satellite services. To the extent that Hughes is permitted to compete with its international satellite customers, knowledge of their respective business plans gives Hughes a distinctly unfair competitive advantage over those entities.

In sum, Hughes' proposed construction and operation of an international Ka/Ku band satellite system creates an undue risk of market concentration and future anticompetitive behavior. Hughes simply is too well entrenched in other aspects of the satellite industry to allow it unrestricted entry into the international market on such a broad scale.

CONCLUSION

For the reasons stated herein, PanAmSat urges the Commission to deny or suspend processing of the Application of Hughes Communications Galaxy, Inc., to construct, launch, and operate a hybrid Ka/Ku band satellite system.

Respectfully submitted,

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December 15, 1995

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Petition to Deny was sent by first-class mail, postage prepaid, this 15th day of December, 1995, to each of the following:

- * Mr. Scott Blake Harris Chief, International Bureau Federal Communications Commission 2000 M Street, N.W., Room 800 Washington, D.C. 20554
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