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FEDERAL COMMUNICATIONS COMMISSION 0480  
OFFICE OF SECRETARY

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June 21, 1996

**VIA HAND DELIVERY**

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, N.W. - Room 222  
Washington, D.C. 20554

DOCKET FILE COPY ORIGINAL

Re: RM No. 8811

Dear Mr. Caton:

On behalf of the Fixed Point-to-Point Communications Section, Network Equipment Division of the Telecommunications Industry Association ("TIA"), we are filing an original and four (4) copies of its Opposition to Petition for Rulemaking in the above-referenced proceeding.

If there are any questions, do not hesitate to contact the undersigned.

Respectfully submitted,

FLETCHER, HEALD & HILDRETH, P.L.C.

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LRR:cej  
Enclosures

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**ORIGINAL**

BEFORE THE

**Federal Communications Commission**

WASHINGTON, D.C. 20554

In the Matter of )  
 )  
Amendment of Parts 2.106 and 25.202 of )  
the Commission's Rules to Allocate the )  
37.5-38.6 GHz Band to the )  
Fixed-Satellite Service and to Establish )  
Technical Rules for the 37.5-38.6 GHz Band )

RM No. 8811

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

**OPPOSITION TO PETITION FOR RULEMAKING**

Pursuant to Section 1.405 of the Commission's rules, 47 C.F.R. § 1.405, the Fixed Point-to-Point Communications Section, Network Equipment Division of the Telecommunications Industry Association ("TIA")<sup>1</sup> hereby opposes grant of the Petition for Rulemaking ("Petition") in the above-captioned proceeding filed by Motorola Satellite Communications, Inc. ("Motorola"). Motorola's Petition appeared on Public Notice, Report No. 2132, released May 21, 1996.

In the Petition, Motorola reiterates its proposal in ET Docket No. 95-183 to: (i) allocate the 37.5-38.6 GHz band to Fixed-Satellite Service ("FSS") downlinks; and (ii) adopt, for the 37.5-40.5 GHz band, the limits on power flux density ("PFD") that apply to that band under the ITU Radio Regulations, Art. 28, § 4(6)RR 2578, 2582, 2583, 2584. Motorola claims that this allocation "is vital for the accommodation of the next generation." As demonstrated below, these proposals are unjustified and contrary to the public interest,

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<sup>1</sup> TIA is the principal industry association representing fixed point-to-point microwave radio manufacturers. TIA members serve, among others, companies, including telephone carriers, utilities, railroads, state and local governments, and cellular carriers, licensed by the Commission to use private and common carrier bands for provision of important and essential telecommunications services.

and thus, Motorola's Petition must be denied.

**I. THE COMMISSION SHOULD NOT PROCEED TO FORMAL  
RULEMAKING BASED ON THE LIMITED INFORMATION  
AVAILABLE IN THE MOTOROLA PETITION**

Grant of a rulemaking petition is not automatic. It is well settled that "[t]he institution of a formal rulemaking proceeding in response to a petition for rulemaking is certainly not obligatory. Parties requesting rule changes . . . must recognize that they have the burden of convincing the Commission that the concerns expressed and the facts supporting them are sufficient to warrant the initiation of a formal proceeding." Amendment of Section 73.658(k) of the Commission's Rules, 63 FCC2d 500, 502 (2977). Furthermore, pursuant to Section 1.401(c) of the Commission's Rules, 47 C.F.R. § 1.401(c), a petition for rulemaking must set forth "the text or substance of the proposed rule, amendment or rule to be repealed, together with all facts, views, arguments and data deemed to support the action requested," and must "indicate how the interest of petitioner will be affected."

In the instant case, Motorola totally fails to meet this burden of proof. In lieu of the detailed showing which Commission precedent and Section 1.401(c) require, Motorola has elected to present to the Commission a series of self-serving statements, barren of evidentiary support on such critical matters as compatibility with terrestrial facilities and need. Motorola conveniently has neglected to reveal how its own interests would be promoted by the rule change it seeks, or how the needs of terrestrial users may be adversely affected.

**II. MOTOROLA'S PETITION IS PREMATURE**

As TIA already has noted in its Reply Comments in ET Docket No. 93-183,

**Motorola's request for more FSS spectrum to provide high-speed broadband voice, video and data is also premature. FSS providers have not even started to use their very recently allocated spectrum at 18 and 28 GHz.**

**Seen at its face value, Motorola's petition is, in fact, nothing more than a thinly veiled attempt to stake out yet another portion of spectrum for the FSS without providing any justification and without specifying any rationale therefor. In proceedings before the Commission, the terrestrial fixed point-to-point microwave services ("FS") have encountered a series of spectrum allocation set backs. For example, the 2 GHz band was reallocated to accommodate PCS and MSS operations; the already congested 6 and 7 GHz bands are being considered for reallocation to permit the superimposition of feeder links; the 12 GHz band has been reallocated to make way for Direct Broadcasting-Satellite ("DBS") service; use of the 18 GHz band will be severely impacted by the recent FSS downlink allocation at 18.9-19.3 GHz and the permanent damage done to the narrow and DEMS 18 GHz bands;<sup>2</sup> and now there is every indication the 28 GHz band will also be lost.**

**The loss of these bands, including the impending loss of the 28 GHz band, by FS users adds new urgency to the need for access to the 37-40 GHz band. New telecommunications technologies have built-in requirements for FS communications. These technologies will support a number of vital public interest services, including but not limited to wireless local loops, backbone PCS networks, and communications systems for**

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<sup>2</sup> **WRC-95 now permits NGSO FSS Space-to-Earth use of the 18.9-19.3 GHz allocation by high density FSS systems such as the one proposed by TELEDESIC. WRC-97 is expected to consider expanding this band to a 18.8-19.3 GHz allocation. Sharing between the earth stations of these systems and fixed microwave will be very difficult at best.**

public safety requirements, utilities and other elements of our national infrastructure. Because of outright loss of some bands formerly available to the FS and growing congestion in the remaining bands below 30 GHz, renewed emphasis is now placed on the 37-40 GHz band (and on the millimeter wave bands above 40 GHz) for future growth. The history of spectrum loss by the FS to other services should not now again be repeated, particularly on the basis of Motorola's unsupported Petition.

**III. NO SUBSTANTIAL EVIDENCE ON THE RECORD  
THAT CO-CHANNEL SHARING BETWEEN FSS  
SYSTEMS AND FS SYSTEMS IS FEASIBLE**

In its Petition, Motorola states that “[t]o avoid interference between the FSS and the terrestrial Fixed Services, Motorola requests that the Commission adopt the power flux density limits of the ITU Radio Regulations for the 37.5-40.5 GHz band. See Radio Regulations, Article 28 § 4(6), RR 2578, 2582, 2583, and 2584. These limits will allow FSS systems and microwave operators to co-exist on a co-primary basis.” Motorola Petition, p. 3. A review of the Radio Regulations reveals that RR 2758 pertains to bands between 17.7 and 27.5 GHz. While RR 2582, RR 2583, and RR 2584 address power flux-density limits between 31.0 GHz and 40.5 GHz, the Radio Regulations also state in RR 2582.1:

**“2582.1**

<sup>2</sup>The provisions of No. ~~2582~~ shall apply until such time as the CCIR has made a Recommendation as to the values of power flux-density limits which should apply in the frequency band specified in No. ~~2584~~, at which time all systems shall meet those power flux-density limits recommended by the CCIR and endorsed by a competent world administrative radio conference.”

Noting the above and since the power flux-density levels of No. 2582 are interim until the CCIR has made a recommendation that is endorsed by a competent World Radio

Conference (WRC), the Commission is urged not to consider incorporating those levels in its Rules.

RR 2582 incorporates by reference the power flux-density limits in RR 2578 that have been established for the 17.7 GHz - 27.5 GHz band. However, the proposed -115 dBW/m<sup>2</sup> pfd for 0-5 degree angle of arrival is unacceptable to the FS interests. At 9 degrees, this level translates into a 15 to 19 dB degradation of threshold in the case of 45 Mb/s 16QAM or 4FSK radios, using 2 ft antennas, 60% efficient and taking C/N ratios from ITU-R recommendation F.1191.

#### **IV. CONCLUSION**

As proven herein, Motorola's Petition is premature, and Motorola totally fails to provide any evidence that sharing by FSS and FS systems is feasible. For these reasons, the Fixed Point-to-Point Communications Section, Network Equipment Division of the

Telecommunications Industry Association respectfully urges the Commission to deny Motorola's Petition for Rulemaking in the above-captioned proceeding.

Respectfully submitted

THE FIXED POINT-TO-POINT COMMUNICATIONS  
SECTION NETWORK EQUIPMENT DIVISION  
OF THE TELECOMMUNICATIONS  
INDUSTRY ASSOCIATION

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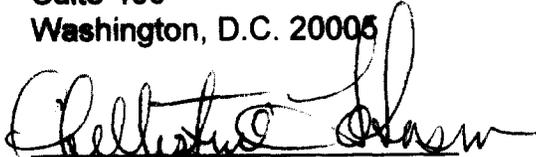
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**CERTIFICATE OF SERVICE**

I, Chellestine Johnson, hereby certify that a copy of the foregoing Opposition to Petition for Rulemaking was sent this 21st day of June, 1996, via first class United States mail, postage prepaid, to the following:

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