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

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of	)	
	)	
Amendment of the Commission's Rules Regarding the 37.0 - 38.6 GHz and 38.6 - 40.0 GHz Bands	)	ET Docket No. 95-183 RM-8553
	)	
Implementation of Section 309(j) of the Communications Act -- Competitive Bidding	)	PP Docket No. 93-253

To: The Commission

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COMMENTS

Microwave Partners d/b/a Astrolink Communications, pursuant to Section 1.415 of the Commission's rules, hereby submits its comments in response to the Notice of Proposed Rule Making ("NPRM") and Order, FCC 95-100, released by the Federal Communications Commission ("FCC" or "Commission") on December 15, 1996, in the proceeding to adopt new rules for radio spectrum at 37,000 - 40,000 MHz.[1] The following is respectfully shown:

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[1] By Orders released January 16, 1996 (DA 96-15) and February 9, 1996 (DA 96-144), the Commission extended the original date for submitting comments in this proceeding. Thus, these comments are timely filed.

I. Introduction

Microwave Partners[2/] is a recent entrant to the telecommunications industry. Our decision to enter this highly competitive market was made after considerable study of the opportunities and potential risks of providing commercial and private telecommunications services utilizing microwave technology and spectrum. The result of this study was a modest business plan that targeted a small number of geographic markets which we believe offer a viable and fertile market for the types of services Microwave Partners seeks to provide.[3/]

2/ Microwave Partners' principals are John P. Erlick and James S. Eaton, M.D. Dr. Eaton, who is Chairman of the company and resides in Washington, D.C., served as Chief of Education at the National Institute of Mental Health in Bethesda, MD from 1974 to 1983, where he developed and led a complete redirection of programs for mental health education in the nation's medical schools and hospitals. Since 1983 Dr. Eaton has divided his time between medical practice, duties as senior examiner with the American Board of Psychiatry and Neurology, work with various non-profit and charitable organizations, and interests in medical education, public health and communications. He is a Clinical Professor of Psychiatry at Georgetown School of Medicine and serves on the Executive Committee of the Board of Directors of Public Voice for Food and Health Policy, a national non-profit consumer/public interest organization. Dr. Eaton has authored 37 publications in the medical and public health literature, served on the editorial boards of three professional journals, and received numerous awards. He has served as a consultant to various entities in the private and public sectors, including the United Nations High Commission for Refugees, the State of Hawaii, and Hedrick and Struggles (an executive search firm). Mr. Erlick, who is President of Microwave Partners and resident manager of its West Coast office in Seattle, WA, is a senior member in a national law firm based in Philadelphia, PA. Mr. Erlick is active in community service, particularly in the mental health arena, and for the past ten years has served as President of the Highline-West Seattle Mental Health Center, a not-for-profit community-based mental health organization. Mr. Erlick, who has been involved in numerous service-based businesses and start-up companies, including those in emerging markets, was acknowledged by Seattle's business community and philanthropic organizations by being granted an "Outstanding Volunteer" award in 1994. Microwave Partners has no direct or indirect interest in or ties to any other 39 GHz licensee or applicant.

3/ In June 1995, Microwave Partners filed applications for point-to-point microwave

(continued...)

Though relatively small in scope, our business plan nonetheless has required a significant amount of time and money to implement.

This is a propitious time for the unfolding and development of new communications technologies and services. In this "Age of Information," potentially valuable data from many fields surface in an order of magnitude that can only be described as exponential. High speed transmission of huge amounts of information -- by voice, image, interactive video, bar code scan, facsimile, and modem -- is at the heart of the information economy and will be the fuel for this explosive market. Microwave Partners plans to be a major next generation provider of such information services, especially in small to medium size metropolitan areas, suburban communities, and rural areas.

Our operation will provide multiple services, including "last mile" services (short-haul communication links) to competitive access providers and to private companies that might need high speed broadband links between offices; "backhaul" and "backbone" communications links for other commercial and private wireless services; and high speed Internet access and interactive video. However, a special interest of Microwave Partners will be in designing and maintaining medical, public health and safety related applications, such as:

[3/](...continued)
stations in the 38,600 - 40,000 MHz ("39 GHz") frequency band in 14 different geographic locations. Each application requested a single channel pair within a defined rectangular service area, in accordance with the FCC's Public Notice of September 16, 1994 ("Common Carrier Bureau Established Policy Governing the Assignment of Frequencies in the 38 GHz and Other Bands to Be Used in Conjunction with PCS Support Communications," Mimeo No. 44787) (the "Policy Statement"), and other applicable FCC rules and policies.

- high speed transmission of medical data between physicians' offices and clinics and hospitals, laboratories and X-ray facilities.

- Interactive videoconferencing between the primary care physician and the specialist/consultant, where all pertinent case data are instantly available, and where immediate feedback to the treating physician is possible.

- Interactive videoconferencing for the continuing education of all health care personnel.

- Medical telemetry, using existing and emerging technologies, so that in vivo data from EKGs, EEGs, PET scans and from devices measuring changes in blood pressure, respiration, and body chemistry can be transmitted rapidly to physicians' offices and clinics.

- Motion detectors and vital sign monitors, mounted on infant cribs, serving as early warning systems for sudden infant death syndrome, as well as for other early childhood dangers. Similar bedside monitoring for bedridden adults would be available.

- Surveillance and security monitoring of high risk areas and of buildings and institutions with large elderly populations.

- Disaster recovery services, as well as the provision of highly specialized routine or emergency medical care for people in remote areas via multimedia concurrent and simultaneous transmissions.

The Commission recently granted four of Microwave Partners' applications. Of the remaining applications, most are mutually exclusive ("MX") with other pending applications and thus are subject to the Commission's December 15, 1995 Order freezing the processing of certain pending applications. In each instance, the Microwave Partners application was rendered MX by a later-filed application. None of Microwave Partners' applications are affected by the freeze on the processing of applications that were not cut-off as of November 13, 1995.

II. Summary of Comments

Microwave Partners does not oppose the Commission's tentative conclusion to hold auctions for new licenses in the 39 GHz band, and for licenses in the 37,000 - 38,600 MHz ("37 GHz") band. As an "incumbent licensee" and a pending applicant, however, we strongly oppose several proposals which apparently are intended to penalize and nullify our efforts in obtaining 39 GHz licenses and which would, if adopted, stop those efforts cold. Based on our understanding of the Commission's statutory grant of general authority to manage spectrum, its specific authority to conduct auctions, and its overriding obligation to regulate in the public interest, we believe these proposals lack a rational basis and are unjustified. We ask the Commission to give thoughtful consideration to, and adopt final rules consistent with, our comments in this proceeding.

III. The Commission Should Continue to Process Pending Applications and Allow Applicants to Resolve Mutually Exclusive Cut-Off Applications

On December 15, 1995, the Commission ordered that pending applications that are subject to mutual exclusivity or that were listed on Public Notice as accepted for filing after September 13, 1995 not be processed, pending the outcome of the rulemaking proceeding instituted on the same day. NPRM, para. 2. The Commission also ordered that amendments to pending applications not be accepted or processed. NPRM, para. 124. In the NPRM, the Commission asked for comment on the ultimate disposition of these "frozen" applications. NPRM, para. 123. We believe the Commission must and should, as a matter of equity and in accordance with applicable law, process such applications that were cut-off as of November 13, 1995, the effective date of the freeze.

A. The Processing Freeze Is Inequitable

The processing freeze is grossly unfair to applicants such as Microwave Partners who filed a single-channel application that fully complies with the FCC's rules and policies. The FCC's rules require that potential applicants for 39 GHz channels coordinate their proposed channel use with both existing 39 GHz licensees and prior 39 GHz applicants. 47 C.F.R. §§ 21.706(c), 21.100(d).[4] Microwave Partners strictly followed these requirements. After conducting extensive and thorough engineering analyses, interference studies, and frequency coordination, Microwave Partners filed only applications that did not conflict with any licensed or applied-for facility. Our applications certify compliance with rule section 21.100(d), which requires applicants to prior coordinate channel usage with potentially affected licensees and prior applicants, and to make "[e]very reasonable effort ... to eliminate all problems and conflicts". 47 C.F.R. § 21.100(d)(2)(iv).

Despite our efforts, several of our applications became MX when other applicants subsequently filed applications for the same channel, seeking geographic service areas that overlapped the service area requested by Microwave Partners. Although the rules do not preclude the filing of MX applications, in some instances the "competing" application requested multiple channels, in violation of the Policy Statement. In some instances the

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[4] In particular, rule section 21.100(d)(1) states:

> Proposed frequency usage shall be prior coordinated with existing users in the area and other applicants with previously filed applications, whose facilities could affect or be affected by the new proposal in terms of frequency interference or restricted ultimate system capacity. Coordination shall be completed prior to filing an application for regular authorization or an amendment to a pending application....

competing "applicant" has ties to licensees and/or applicants with other channels in the market. And in some instances, competing applicants ignored their obligation under the FCC's rules as the later-filed applicant to resolve the conflict[5] -- indeed, they have taken absolutely no steps whatsoever to resolve these conflicts.

We refer to these circumstances and to the governing rules in order to demonstrate the patent unfairness to Microwave Partners and similarly situated applicants of freezing the processing of all MX applications, regardless of the circumstances under which the applications became MX and regardless of the failure of some applicants to follow the FCC's rules. Microwave Partners relied on these rules and the FCC's obligation to enforce them, and a decision by the FCC now not to process these applications would be arbitrary, capricious, and an abuse of discretion. The Commission should process MX applications consistent with its rules and policies, and dismiss applications that are found to be not in compliance with those rules and policies.

B. The Freeze on Amendments Is Unlawful

The Communications Act expressly states that although Congress has given the FCC authority to hold auctions for new licenses, the FCC still has an "obligation in the public interest to continue to use engineering solutions, negotiation, threshold qualifications, service regulations, and other means in order to avoid mutual exclusivity in application and

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[5] Rule section 21.100(e) requires later-filed applicants to amend their applications to remove the conflict, or face dismissal.

licensing proceedings". 47 U.S.C. § 309(j)(6)(E). A decision not to accept and process amendments that resolve mutual exclusivity clearly violates this statutory provision.[6]

The FCC already has in place "service regulations" to resolve MX 39 GHz applications. An applicant may file a minor amendment to any pending application "as a matter of right." 47 C.F.R. § 21.23(a)(1). Amendments that resolve frequency conflicts with authorized stations or other pending applications which would otherwise require resolution by the Commission are classified as minor amendments. 47 C.F.R. § 21.31(e)(2). And, when frequency conflicts arise between pending applicants, the later filing applicant has an obligation to amend its application to remove the conflict. 47 C.F.R. § 21.100(e). Many applicants already have used "engineering solutions" and have filed amendments to eliminate mutual exclusivities.[7] By freezing the processing of such amendments, the Commission has ignored an explicit Congressional directive to follow its own rules, in violation of the Administrative Procedure Act.[8]

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[6] Commissioner Chong cited Section 309(j)(6)(E) as supporting the decision to continue processing uncontested applications. However, the best reason to continue processing such applications is that the Commission has no authority to hold an auction if there are no MX applications. 47 U.S.C. § 309(j)(1). Chairman Hundt's position that no pending applications should be processed is in direct opposition to the will of Congress, and was properly rejected by a majority of the Commissioners.

[7] Compounding the random unfairness of the freeze is the fact that some of these amendments serve to reduce to one channel certain applications that were filed after Microwave Partners' applications and originally requested multiple channels. Thus, a Microwave Partners' application would not be processed because it was rendered MX by a later-filed defective application that the Commission proposes not to act on either as filed or as amended. See, e.g., File No. 9506887. Other amendments serve merely to resolve minimal geographic overlaps. See, e.g., File No. 9509430.

[8] A reviewing Court will "hold unlawful and set aside agency action ... in excess of statutory jurisdiction, authority, or limitations, or short of statutory right." 5 U.S.C.

(continued...)

The Commission plainly is unwilling to process the MX applications, citing as one reason for the freeze that resolving MX applications "requires a greater expenditure of Commission resources than processing uncontested applications". NPRM, para. 123. However, no additional resources would be required to accept and process amendments to pending applications that serve to resolve mutual exclusivity. Therefore, and in addition to dismissing applications found to be defective, we urge the Commission to process amendments that resolve mutual exclusivity.

IV. Construction Requirements for Incumbent Licensees Must Be Reasonable

The Commission has proposed a rule that would result in incumbent licensees losing their rights to construct and operate facilities in their authorized service areas if they fail to build and place in operation, within 18 months of the adoption of final rules in this proceeding, at least four links per 100 square kilometers of their authorized service area. NPRM, paras. 2, 105.

Requiring licensees to construct four links per 100 square km is unreasonable. In order to retain a single license, an incumbent would be required to build an average of 250 links and spend exorbitant amounts of money. The NPRM ignores the obvious financial effects on incumbents, leading to the conclusion that the FCC is interested less in the services that would be provided by these links than in "recovering" the spectrum that would

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[8/](...continued)

§ 706(2)(C). The certain strain on Commission resources caused by responding to legal challenges to the freeze should, in combination with other reasons stated herein, cause the Commission to determine that continued processing of pending cut-off applications and amendments thereto is in the public interest.

revert to the Commission if the incumbent fails to satisfy the inflated standard. NPRM, para. 108.

Moreover, there is no rationale for requiring a multimillion dollar investment in equipment when it is reasonably foreseeable that after that investment has been made equipment is likely to be both significantly less expensive and more advanced. The commercial market for 39 GHz radios was virtually nonexistent until recently, and only a few manufacturers currently are producing radios. As the market becomes more competitive, equipment costs will decrease and technological innovations will be made. Eighteen months simply is too narrow a timeframe in which to squeeze such a massive construction obligation.

The Commission's existing rules provide 18 months for a licensee to satisfy its construction obligation by building and operating a single link. This rule recognizes that selecting sites, obtaining permits, building facilities, and implementing service to customers are substantial undertakings that cannot be completed overnight. The Commission's proposal to require that licensees build perhaps hundreds of links in only 18 months is unworkable and represents a sharp departure from reasoned decisionmaking.

Finally, the Commission's proposal is anticompetitive and unfair to incumbent licensees who only recently received their authorizations. Licensees who have been authorized far longer than Microwave Partners will have a substantial headstart towards meeting the obligation.

Microwave Partners believes the Commission's alternative proposal that incumbent licensees construct a fixed number of links per rectangular service area, NPRM,

para. 107, is more reasonable. However, rather than require that the fixed number be the same regardless of the size of the service area, the number of links should vary by the population within the service area. Microwave Partners agrees with the Commission's alternative proposal to require at least 15 links in top 10 markets, at least 10 links in markets 11-25, and at least 5 links in all other markets. NPRM, para. 107. Incumbent licensees should not be required to satisfy the construction benchmarks within 18 months. Instead, the Commission should use the date of license renewal (February 1, 2001 for all 39 GHz incumbents) to determine whether the construction obligation has been satisfied. Requiring all licensees to meet the standard in only 18 months unfairly benefits those whose authorizations were granted months or even years before the Commission proposed new rules, and who already have had substantial time to construct facilities. In contrast, tying the obligation to the renewal deadline levels the playing field for all licensees.

V. Minimal Technical Standards Are Appropriate

In the NPRM, the Commission tentatively concludes that "only those technical rules required to minimize interference between channel blocks and between service areas are needed," and that having uniform standards for both the 37 and 39 GHz bands "should allow for manufacturing efficiencies resulting from greater commonality in equipment." NPRM, para. 115. Microwave Partners agrees with these conclusions, and supports the Commission's proposal that there be no transmitter power or directional antenna standards and a maximum EIRP of +55 dBw. NPRM, para. 115. Microwave Partners also supports operational flexibility for licensees in the 37 and 39 GHz bands so that they will have wide latitude to provide a variety of services in response to market demand. NPRM, para. 13.

All licensees in the 37 and 39 GHz bands should be subject to the same technical standards and requirements. Consequently, Microwave Partners opposes the proposed creation of an "additional technical standards" for "new assignments ... not acquired through competitive bidding." NPRM, para. 119. These additional standards would allow the use of only Category A antennas and require a minimum equivalent digital efficiency of 1 bps/Hz. The Commission states no rationale for imposing additional technical requirements based on the method under which a license is awarded.

VI. Eligibility Restrictions Are Unnecessary

The Commission proposes that eligibility for new 37 and 39 GHz licenses be restricted to personal communications services, cellular, and specialized mobile radio licensees for a period of time. NPRM, paras. 102-103. This proposal is inconsistent with the Commission's stated rationale for issuing new 37 and 39 GHz licenses by auction, which is that "competitive bidding is an extremely efficient method of assuring, with a minimum of regulatory burden, that channels are assigned only to applicants with the greatest need for the spectrum." NPRM, para. 25.

On the same day the Commission suggested limiting eligibility for new 37 and 39 GHz licenses, it rejected eligibility restrictions in another service, finding that such a policy promotes diversity among licensees and deters speculation.[9] The same policy should apply to the 37 and 39 GHz bands. Restricting eligibility to existing licensees flies in the

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[9] Amendment of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, First Report and Order, Eighth Report and Order, and Second Further Notice of Proposed Rule Making, FCC 95-501, released December 15, 1995, at para. 126.

face of the Commission's obligations to promote economic opportunity among a wide variety of applicants and to ensure that small businesses and others receive an opportunity to provide wireless services. 47 U.S.C. § 309(4)(C),(D). Eligibility restrictions also are anticompetitive because they preclude new entrants who desire to obtain channels from doing so, while entrenching existing licensees.

WHEREFORE, Microwave Partners respectfully requests that the Commission adopt rules consistent with the foregoing.

Respectfully submitted,

MICROWAVE PARTNERS

By: _____
James S. Eaton
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Partners

Date: 03/04/96