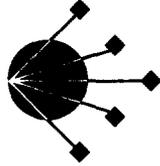


CATAPULT
COMMUNICATIONS



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NOV 1 1993

October 28, 1993 FCC - MAIL ROOM

Office of the Secretary
Federal Communications Commission
Washington D.C. 20554

Dear sirs:

Enclosed are comments regarding docket 93-253. In these comments we propose that the Commission modify its order to establish a limited number of "designated entity enterprise zone licenses" which will benefit the entire PCS marketplace and further the Commission's ability to meet its legislative goals (at no cost to the public). We even think there is a reasonably good chance that this concept, while novel, is not particularly controversial.

As a small business, we are unable to provide local support to the Commission and its staff regarding our comments. While fully recognizing the Commission's obligation to be fair to all commenters, we would be happy to provide further information regarding this material from our California office upon the request of the Commission, its staff, or any other interested party.

Sincerely,

Richard A. Karp

Dr. Richard A. Karp
President

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253
Docket No. 93-~~255~~

Comments on document FCC-93-455
Notice of Proposed Rule Making:
Implementation of Section 309(j),
Competitive Bidding

Catapult Communications Corp.
160 South Whisman Road
Mountain View, Ca 94041
tel: 415 960 1025
fax: 415 960 1029

Contact: Richard A. Karp

Despite the large number of experimental PCS licenses issued by the Commission, the technology and standards required to link PCS services with the emerging national data highway do not now exist. Further, while U.S. companies are among the leading suppliers in the mobile marketplace, there is strong foreign competition. Often this foreign competition is (officially or unofficially) protected by its own local government.

PCS needs to be a part of the national data highway. And U.S. industry -- including future individual entrepreneurs -- must be given every opportunity to remain competitive in the PCS equipment arena. That is part of what Congress meant when it called for the PCS deployment plan to ensure "the development and rapid deployment of new technologies, products, and services for the benefit of the public."

Also among the Commission's goals is the obligation to disseminate licenses "...among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women."

We believe that these goals will be better met if the order is modified to add a new type of designated entity license, called a "designated entity enterprise zone license" or "DE enterprise zone license" for short. The service to be provided by a DE enterprise zone licensee will be called "enterprise zone service."

A DE enterprise zone licensee would be required to provide,

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in addition to normal PCS operation, specialized services that would encourage the development of new PCS products by providing a low-cost online product test capability.

This function will be useful to all product developers in the PCS marketplace -- large and small. But because it is truly a specialized function, only smaller entities are likely capable of operating enterprise zone service profitably. That is why it is natural to restrict DE enterprise zone licenses to designated entities.

Hence, we propose that the order be modified, as described below, to allocate a small percentage of the total block D (10 mhz) bandwidth to DE enterprise zone licenses. This will require modifying some portions of sections 68 - 76, 103 - 109, or 121 of the proposed order.

Before proposing specific requirements, we first discuss the nature and advantages of enterprise zone service.

The nature of designated entity enterprise zone service

A DE enterprise zone licensee would operate a normal PCS service for the vast majority of its customers, including full connection to the public switched telephone network. Funds from this normal operation would cover the licensee's operating costs and also allow the licensee to obtain equipment financing.

But a DE enterprise zone licensee would additionally be required to provide a specialized, low cost new equipment trials service. This trials service would provide manufacturers and entrepreneurs with a way to test new PCS products in a live environment prior to general market introduction.

By significantly reducing the cost of PCS product development, enterprise zone service will strongly encourage the development and deployment of new products throughout the entire PCS network, an important goal of the Commission's proposed order.

By limiting enterprise zone service to designated entities, the Commission also legitimizes the mandate imposed by subsection 4(D) of section 309(j) through establishing an important new service most naturally provided by a designated entity.

DE enterprise zone service must be distinguished from test

use within the unlicensed PCS bandwidth. Unlicensed PCS bandwidth is intended to permit the development of specialized applications. Enterprise zone service is instead directed at encouraging rapid development of the much larger licensed PCS marketplace.

Fulfilling the additional requirements imposed on DE enterprise zone licensees will be expensive. Hence, we propose that the Commission offer concessions to encourage enterprise zone applications. To insure that applicants for these licenses are serious, we also propose specific additional requirements to be imposed on DE enterprise zone applicants.

The DE enterprise zone proposal gives the Commission a simple means to help secure the success of the entire PCS concept. Enterprise zone service will stimulate an ongoing flow of new products to the PCS marketplace. It also will provide a specialized, yet important, function best accomplished by designated entities.

Background and Justification

Catapult Communications Corp. is a high-end manufacturer of telecommunications test equipment. Catapult is a small, engineering-oriented company which actively develops in digital cellular test equipment. Catapult's customers include several of the world's largest mobile equipment manufacturers.

Catapult believes that existing PCS standards do not meaningfully address data use of the PCS network, particularly in conjunction with the emerging effort towards a national data highway. Both technical and standardization problems remain; no true consensus has yet emerged.

This situation invites entrepreneurial involvement as well as further development by existing cellular suppliers. To achieve maximum product growth, however, it is imperative to keep market entry costs low. Further, it is usually impossible to identify new entrepreneurs in advance. Catapult believes that all PCS product developers will benefit if a nurturing environment is established for product experimentation and test.

The DE enterprise zone license proposed here gives the Commission an ideal opportunity to do just that -- without jeopardizing the overall PCS program in any way and at no cost to the public.

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Catapult is a small business, and believes it could qualify as a DE enterprise zone applicant. If a DE enterprise zone license similar to that proposed here were adopted, Catapult would likely apply for a single 10mhz license in its home BTA (Silicon Valley, California). Catapult knows of many other companies which also meet the requirements proposed to become DE enterprise zone applicants, but Catapult does not know if any of these companies would apply for a license.

Specific Proposals

In this section, we make specific suggestions about how the bidding process should be modified to incorporate DE enterprise zone licenses.

In designing these modifications, we have tried to make enterprise zone services sufficiently inviting so that they would attract qualified applicants despite a higher cost structure than ordinary PCS service. At the same time, we do not want a free-for-all, so we propose restrictions which will limit the application pool to serious applicants.

We propose that a "designated entity" may bid to operate a PCS license known as a "designated entity enterprise zone license." Any benefits and requirements stated below shall be in addition to the benefits and requirements applicable to all designated entity bids.

For all applicants who apply to operate a DE enterprise zone license, the Commission shall require a specific short form certification by the applicant that it agrees to and is currently capable of meeting all of the specific DE enterprise service license requirements, without relying on the services of subcontractors or non-employee consultants.

The applicant must further certify that it understands that the commission may choose to limit DE enterprise zone licenses to a fixed percentage of the total designated entity licenses, and that such licenses will be further restricted to frequency block D.

The long form application shall require supporting materials to justify the short-form certification. Before awarding any DE enterprise zone license, the Commission shall satisfy itself that the applicant meets the relevant requirements, detailed below.

In the event that, prior to license award, the Commission finds that the applicant does not meet the requirements to operate a DE enterprise zone license, or that it the Commission has awarded all the DE enterprise zone licenses that it intends to, the applicant may (subject to payment of any additional required fees) elect have its bid treated as a designated entity bid for the same license. Alternatively, the applicant may withdraw its bid, receiving a refund of all fees deposited.

An applicant for a DE enterprise zone license shall receive an additional 50% credit in the application process. Further, applicants for DE enterprise zone licenses shall be exempted from depositing 50% of any required application fee, provided that the required application fee exceeds \$100,000. Finally, a DE enterprise zone licensee will be allowed two additional years to meet the 2/3 and 90% build-out requirements.

Here are the minimum mandatory additional requirements a licensee must agree to in order to bid for an DE enterprise zone license:

a. The licensee will allow access to enterprise zone service on a fair and equitable basis to any equipment which meets openly published minimum technical standards, established as described below.

b. Within six months of the license award, the applicant will establish, and file with the Commission, technical standards for interconnection to the licensee's enterprise zone service. The licensee may revise or extend these standards from time to time, as appropriate. However, the sole purpose of these technical standards, and any revisions and extensions, shall be to ensure that equipment used within the enterprise zone does not damage any public network.

c. Once completed, the licensee will make copies of the then current technical standards available to anyone requesting them, charging at most a reasonable copying fee.

d. Within six months of adopting the technical standards described above, the licensee will have fully operational a compatibility testing program whose sole purpose is to verify compliance with the published standards. The licensee must agree, if requested by any equipment supplier, to sign a standard non-disclosure agreement covering equipment submitted for test. However, the licensee may (but need not) publish a list of all equipment which has passed the compatibility tests.

e. If the licensee, through no fault of its own, is unable to obtain the equipment needed to establish a compatibility testing program in the required time, the Commission will extend the deadline as appropriate.

f. The licensee will offer compatibility testing free of charge at least once a year to any equipment supplier which requests it.

g. The licensee will not require successful completion of the compatibility test program as a pre-condition for operation in the enterprise zone, unless the licensee has reason to believe that the equipment violates the published technical standards. In this latter case, the licensee will offer the equipment supplier at least two free opportunities per year to undertake compatibility testing.

h. The licensee will provide any compatibility testing beyond the free allowance at a fair and reasonable charge.

i. The applicant will apply for a license in an area where local companies and entrepreneurs are likely to take advantage of the special services provided.