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

APR 22 1994

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )  
)  
Amendment of the Commission's )  
Rules to Establish New Personal )  
Communications Services )

GEN Docket No. 90-314

**COMMENTS OF OMNIPPOINT CORPORATION**

Omnipoint Corporation ("Omnipoint") hereby submits its comments on the record developed by the PCS Task Force at the panel discussions held at the Commission on April 11 and 12, 1994 (the "panel discussions").

**INTRODUCTION AND SUMMARY**

Although Omnipoint has strong opinions on most of the topics covered in the panel discussions, Omnipoint believes that most of the positions taken by the panelists could already be found in prior submissions and presentations. As these issues have been debated thoroughly over the past several years, including in various comments, reply comments and reports filed by Omnipoint, we will not comment on them further at this time. Rather, Omnipoint will focus on two specific issues raised in the panel discussions: (1) the Motorola/Qualcomm/AT&T proposal that PCS license holders be required to buy equipment that complies with a standard developed by an American National Standards Institute ("ANSI") accredited standards body and (2) the effect of the proposed channelization plan for unlicensed PCS on users of the isochronous bands.

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## **DISCUSSION**

### **I. Omnipoint Strongly Supports the Standards Process, But Opposes the Proposal that PCS License Holders Be Required to Buy Equipment that Complies with a Standard Developed by an ANSI Accredited Standards Body.**

Though small, Omnipoint has devoted considerable resources to national and international standardization efforts for all aspects of PCS and particularly that of the 2GHz PCS air interface. An Omnipoint employee, Gary K. Jones, chairs TR46.3.3 (Air Interface Working Group for PCS at 2 GHz) and is the co-chair of the Joint Technical Committee on Wireless Access ("JTC"). Internationally, Mr. Jones is also a member and regular participant in the United States delegation to Task Group 8/1. Omnipoint is also a member of both Committee T1 Telecommunications ("T1"), the Telecommunications Industry Association ("TIA") and regularly participates in such standards bodies as T1P1, TR46 and the JTC.

In addition, Omnipoint is a member and participant of several relevant communications associations and organizations such as: 1) the Personal Communications Industry Association ("PCIA"), where Omnipoint employees hold several chairman positions, including of the Technical and Engineering Committee and the Task Force on E9-1-1 Emergency Access; 2) the Wireless Interconnection and Numbering Committee ("WINC"); 3) Industry Numbering Committee ("INC"); and 4) UTAM, where an Omnipoint employee is on the Board of Directors.

For a small company the size of Omnipoint, this level of participation represents a substantial allocation of manpower and resources and gives a clear indication of the importance and commitment Omnipoint places on the standardization process.

The importance to Omnipoint of this standardization effort is twofold. First, as a developer and manufacturer of an air interface for PCS, standards allow a peer review of the equipment specifications by various manufacturers and a forum for potential service providers to obtain sufficient evaluation information to form opinions on which system(s)

to implement. Second, as a planned service provider, standards provide one basis for helping foster interoperability and compatibility between various components of the system from multiple manufacturers.

However, as important as standards are to Omnipoint and the communications industry as a whole, a requirement that PCS license holders must buy equipment that complies with a standard developed by an ANSI accredited standards body has never been and should not now be the basis for equipment to be available to the PCS industry and the public.

There are clear public interest reasons for the Commission not to adopt a rule embracing the Motorola/Qualcomm/AT&T proposal: 1) any such rule would discriminate against new technology entrants by favoring systems that have previously gone through the ANSI standardization process; 2) the delay to service providers choosing to implement new and innovative technologies would be substantial; and 3) the rule would not serve the stated purpose of the proposal -- ensuring interoperability either at the manufacturer or the user level.

1. **The Proposal Is Discriminatory**

The concept that equipment must be standardized by an ANSI accredited standards body prior to type-acceptance and implementation for PCS clearly discriminates against new and innovative technologies. By placing the requirement on PCS, the only systems that could rapidly be placed in service are systems that have previously gone through an ANSI accredited standardization process. Requiring a system to be standardized by an ANSI accredited standards body would, for example, allow both IS-54 (TDMA Cellular) and IS-95 (CDMA Cellular) to simply be upshifted in frequency and applied to PCS and give them a significant time advantage over any new PCS technology.

The possibility for even greater discrimination comes from the realization that the standardization effort is not purely technical, but is also a highly political process where

company business agendas can and do make their presence known. If this proposed standardization requirement were in place, it would be possible, and even probable that one or more company interests would push for rapid standardization of candidate systems that were already an interim standard while inhibiting the progress of new technologies and technologies that have been standardized by some other body. This non-technical, *de facto* delay of newer technologies would assure early deployment of systems that may or may not be optimal for PCS, but which had the benefit of having already been standardized by an ANSI accredited body. That would inhibit the deployment of other systems by delaying their progress through the standards mechanism.

This scenario is entirely possible given that the standardization mechanism is at best a consensus-based process requiring that a majority of the participants agree to any decision taken or action approved. It is theoretically possible for a small number of companies or even a single company focused on a business agenda to slow down or even stall the progress of a competing technology.

This situation could be exacerbated by the fact that the chairpersons of the various committees and subcommittees within the standards bodies have historically been employed by the very same companies proposing this new requirement. There are an inordinately high number of these key standards bodies positions held by the three companies proposing this requirement.

## **2. The Delay To Service Providers.**

As described above, there is the potential for a purposeful impeding of the standardization process for new or non-ANSI approved technologies. But even with no artificial delays, the standardization process is long and arduous. The typically accepted life cycle for the standardization of a new technology is *five years*. Even IS-95, which had a very focused cadre of participants and purpose took almost two years to complete only the first pass at a standard.

A requirement to complete this standardization process before type-acceptance and implementation would either restrict service provider choices to the two systems mentioned above or require the service provider to delay its entry into this highly competitive field until its system of choice had completed the standardization process.

No such requirement has been imposed on the cellular industry and rightfully so. Had this requirement been in place, new technologies to satisfy market demands, like CDPD for cellular data, might not have been developed as rapidly or at all. Note that allowing a single vendor's proprietary, unstandardized technology for ESMR has not been opposed by any company, especially Motorola. Motorola does not explain its contradictory stance with respect to PCS.

The Commission has taken a position with respect to PCS that technical innovation is to be a driving factor in bringing the next generation of voice and data services to the public in as timely a manner as possible. Requiring that any technology used for PCS must first complete the ANSI accredited standardization process would not only restrict the rapid implementation of PCS to technologies proposed for compressed 800 MHz cellular voice services, but would inhibit new and perhaps unforeseen technological advances from being quickly developed and deployed to meet a marketplace need.

3. **The Proposed Policy Does Not Serve Its Stated Purpose.**

The reasons given to support the need for this requirement are to ensure interoperability and to force manufacturers to build products that are compatible. While these are laudable goals, it is not the Commission or the proposed rule that will force their attainment. The market will demand this and ensure it.

In considering the issue of interoperability at the physical or air interface level there appears to be significant interest in having at least some number of different technologies. This appears most evident when considering that PCS is supposed to be different than "cellular" with better quality, higher data rates and more deliverable

services. If the only systems available for first implementation use upshifted cellular technologies, this service and capability differentiation simply is not possible. There are also business reasons for wanting multiple air interface technologies. With potentially up to seven different PCS licenses available in a given market area, technology differentiation may well be the mechanism used by a company to acquire sufficient market share to remain profitable.

An analogy might be drawn from the personal computer industry where, even though the early years were dominated by one company and operating system, the marketplace was able to throw off the shackles of a virtual monopoly and embrace new technologies. This development of technologies -- Macintosh, DOS, UNIX, VMS, etc. -- resulted in multiple manufacturers of diverse technologies and a well served marketplace characterized by product differentiation. No consumer was harmed by the availability of choices and there were no required, lengthy, political standards processes which otherwise would have interfered with new product introduction to the public.

While standards form one means of achieving compatibility of system elements between multiple equipment manufacturers, a mandate from the Commission that this be a requirement is not the driving force behind compatibility. This force always has and always will come from the marketplace and the spectrum license holders that write purchase orders for equipment. The proposal that a Commission rule or regulation is required in order to guide the service provider in his equipment purchasing decision smacks of a fallback to the monopolistic telephone company mentality and insinuates that the marketplace is incapable of making good business decisions.

## **II. UNLICENSED FREQUENCY ALLOCATION.**

Omnipoint supports the current frequency allocation (40 MHz in the 1890 to 1930 MHz band) proposed for unlicensed PCS. Omnipoint also supports the decision to allow 5MHz channels in the isochronous portion. However, Omnipoint continues to oppose the proposed channelization resulting in the inequitable treatment of the users of the

isochronous bands. The current requirement that wideband (up to 5 MHz) systems only be allowed to use the lower isochronous band, which is heavily loaded with OFS users, is unfairly restrictive and not technically supportable. This should be rectified. Further, any change to the unlicensed band allocation should take a nondiscriminatory position with regard to the benefits which new, wider band technologies using up to 5MHz can provide. Omnipoint's full position on the technical issues regarding the unlicensed band are contained in Comments of Omnipoint Corporation, GEN Docket No. 90-314 (Jan. 3, 1994).

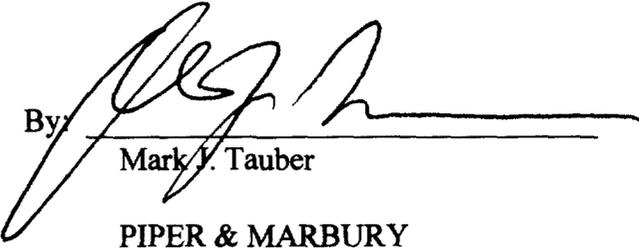
### **CONCLUSION**

There appears to be no technical or regulatory reason to require that all equipment used for PCS be standardized by an ANSI accredited standards body before type-acceptance and implementation. Any such regulation would unduly benefit some companies by setting up a mechanism to allow certain technologies to pass quickly through the standardization process, while delaying the availability of other technologies by slowing their progress through the process. This clearly would not serve the initial implementation need of the current marketplace and would continue to stifle future innovation to satisfy new market needs. Therefore, Omnipoint urges the Commission to reject the proposal put forth by, Motorola, Qualcomm and AT&T as potentially self-serving and let the marketplace be the judge which technologies best fit PCS requirements and business plans.

Omnipoint supports the current proposed 40 MHz frequency allocation for unlicensed PCS, but opposes the discrimination against 5MHz channels in the isochronous bands.

Respectfully submitted,

OMNIPOINT CORPORATION

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