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June 1, 1994

HAND DELIVER

Mr. William Caton
Acting Secretary
Federal Communications Commission
1919 M Street, NW #222
Washington, DC 20554

Re: GEN Docket No. 90-314
Ex Parte Presentation

Dear Mr. Caton:

Omnipoint Corporation presents the enclosed materials in order to urge the Commission not to adopt an unlicensed PCS band plan that reflects the isochronous systems of only three vendors. The attached five-page bullet sheet explains: (1) how subchannelization is deleterious to the development of isochronous devices in PCS and (2) how a majority of industry participants oppose such channelization in unlicensed PCS. The attached letter rushed out on May 26 by such industry leaders as Omnipoint, Ericsson, Rockwell, and ROLM also emphasizes the importance of keeping the unlicensed PCS spectrum from specific segmentation. We believe that forced channelization of the unlicensed PCS band can only lead to less consumer choice, higher prices for unlicensed devices, inefficient use of the spectrum, and less interoperability between the licensed and unlicensed bands.

We ask that the Commission not force such a contentious plan on the isochronous unlicensed PCS industry if, at this late stage in the reconsideration process, the unlicensed band is reduced to 10 MHz for isochronous and 10 MHz for asochronous devices. In particular, as articulated in our January 3, 1994 comments in the reconsideration process, we urge: (1) a nonchannelized approach which instead uses an intelligent Listen-Before-Talk "packing" rule; and (2) that the 10 millisecond listening period be increased to 20 milliseconds (which does not eliminate any isochronous system). In the alternative, we urge the Commission to simply identify the 1910-1930 MHz band for unlicensed PCS, but refrain from establishing any further

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unlicensed rules until after it has a further proceeding to allow parties to consider all the unlicensed issues in light of losing half the unlicensed spectrum.

In accordance with the Commission's ex parte rules, I hereby submit one original and one copy of this letter.

Sincerely,

Mark J. O'Connor

Mark J. O'Connor
Counsel to Omnipoint Corporation

Enclosures

cc: Mr. Julius Knapp
Mr. Phillip Inglis
Mr. David Means
Commissioner Hundt
Commissioner Quello
Commissioner Barrett
Commissioner Chong
Commissioner Ness
Mr. Ralph Haller
Mr. Thomas Stanley
Mr. Donald Gips
Mr. Robert Pepper
Mr. Michael Katz
Mr. Gerald Vaughan
Mr. Richard Engelman
Mr. John Williams
Mr. David Siddall

Mr. William F. Caton, Acting Secretary
Federal Communications Commission
Washington, D.C. 20554

May 26 1994

RE: Gen. Dkt. No. 90-314
Ex Parte Presentation

Dear Mr. Caton:

In response to the modified PCS band plan proposed by Motorola (on May 25 1994) and now being widely discussed, the undersigned companies have come together in less than 24 hours to present the following facts for your consideration:

1. The reduction of unlicensed spectrum in the 1850-1990 MHz band from 40 MHz to 20 MHz could be devastating to the unlicensed PCS industry depending on the final definitions for use of the remaining unlicensed spectrum (i.e., split between isochronous and asynchronous, removal of segmentation, and efficiency of band usage).

2. In the proposed plan the (previously) lower isochronous band (1890-1900 MHz) would be eliminated. This would preclude market participation by advanced technology manufacturers with systems using bandwidths greater than 1.25 MHz, unless this unnecessary 1.25 MHz segmentation is eliminated. The elimination of wide band technologies in the unlicensed allocation will result in fewer product offerings to the consumer, thus limiting the product competition and driving consumer equipment prices higher.

3. Many companies have recognized that the proposed channelization of eight 1.25 MHz blocks is spectrally inefficient (particularly when used by 100 kHz or 200 kHz systems) and cannot be technically justified. This has been discussed and demonstrated in prior submittals. In addition, wide band technologies (i.e. up to 5 Mhz) can effectively coexist with narrow band technologies to the extent that channelization is not required.

4. Interoperability between licensed and unlicensed PCS equipment is a key consumer benefit of PCS. This requires licensed and unlicensed PCS

spectrum to be close together (i.e., both within the 1850-1990 MHz PCS band). However, unlicensed wide band isochronous advocates are the primary manufacturers that are considering interoperability between licensed and unlicensed operation in the 1910-1930 MHz band. Therefore, it is critical that any unlicensed allocation within 1850-1990 MHz provide for wide band isochronous operation.

Proposed Solution:

To preserve the benefits of consumer choice, lower prices on unlicensed devices, and interoperability between licensed and unlicensed spectrum, we recommend that within any isochronous allocation, specific segmentation be eliminated and technologies up to 5 MHz be allowed.

Please consider these points in your allocations of unlicensed spectrum and rules for utilization of the spectrum that will provide for advanced services to the PCS consumer.

Sincerly,

Omnipoint Corporation
President
Douglas G. Smith

Ericsson GE Mobile Comm.
Director, Cordless Product Management
Peter Murray

Rockwell International Corp.
Manager, Standards Development
Quent Cassen

Rolm
Manager, System Architecture
Dr. Peter Kozdon

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ROLM, A Siemens Company
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Cutting the Unlicensed Spectrum in Half from 40 MHz to 20 MHz is Too Great a Reduction to Then Favor Specific Vendors' Systems.

- Channelization of the Isochronous Band Should Be Eliminated as Supported by the Majority of Industry Participants.

- If Channelization is Not Going to Be Eliminated, then Additional Time Should Be Taken to Equitably Accommodate the Requests of More than Just Three Vendors.

The Majority of Industry Participants Want to Eliminate Channelization in the Isochronous Band

- 74% of PCIA Technical and Engineering Members Opposed Channelization, ***but*** a Vote of 75% was Required for PCIA to take a Formal Position.

- 60% of WinTech Isochronous Participants Opposed Channelization, ***but*** a Vote of 66% was Required for WinForum to take a Formal Position.

- The "Gang of Three" - AT&T, Motorola, and NT - Still Try to Create the Illusion that Their Minority Position Represents "Consensus".

[redacted]

The Following Major Players Opposed Channelization of the Isochronous Band:

Ameritech	Hughes	Southwestern Bell
Apple	Lace	SpectraLink
Bellcore	Omnipoint	Time Warner
BellSouth	Pacific Bell	US West
Cable Labs	Rockwell	
Ericsson	Rolm	

(4)

The May 9, 1994 AT&T/Motorola Presentation Favoring 1.25 MHz Channelization is Fatally Flawed

- The AT&T/Motorola Position Does Not Represent WinForum, Nor UTAM, Nor the Industry at Large.

- Their Proposed Channelization Within the Isochronous Band Can Waste Over 50% of the Spectrum.

- Their Comparison Between 1.25 MHz and 5 MHz Systems is an Illusion:
  - The 5 MHz System They Invent is a Non-Existent "Strawman".
  - They Artificially Limit the Efficiency of 5 MHz Multiple User Systems.
  - They Ignore the Much Lower Power Spectral Density of Wide Band Systems (for example, only 1/50th of the Power of a 5 MHz System is Seen by a 100 kHz System.)
  - They Ignore the Fact that Independent Narrowband Systems Cannot Use Adjacent Channels in Close Proximity.
  - They Grossly Understate the Re-Use Factors of Narrowband Systems.
  - They Ignore the Time Domain Sharing Capabilities of SS TDMA Systems.

Unlicensed Spectrum Surrounded by Licensed Spectrum Should Be Allocated Primarily for Systems which Interoperate Between the Two Types of Applications

- There is No Point in Favoring Stand Alone Unlicensed Systems (i.e., non-interoperable with licensed systems) in Spectrum Adjacent to Licensed Systems

- Because the 1910-1930 MHz Unlicensed Band is the Only Unlicensed Spectrum Adjacent to <u>All</u> the Newly Proposed Licensed PCS Spectrum, Interoperable Systems Should be given Priority in this Band

- Stand Alone Unlicensed Systems could be Allocated Frequency Anywhere on the Spectrum.