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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Ms. Donna R. Searcy
Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: Paging Network, Inc. request for pioneer's preference for VoiceNow service, ET Docket No. 92-100, File No. PP-84; Erratum to Reply Comments of Minilec Service, Inc.

ORIGINAL FILE

Dear Ms. Searcy:

The following typographical errors in the Appendix attached to the Reply Comments of Minilec Service, Inc. in the above-referenced proceeding should be corrected by the parties:

Page 2, Line 8: "cellular" should be "caller"

Page 3, Line 2: "massage" should be "message"

Page 3, Lines 12/13: "deflects" should be "selects"

Page 3, Line 16: "improper" should be "proper"

Page 3, Line 18: "EIA/TIA-IS-65" should be "EIA/TIA-IS-54-A"

Also, the specification referred to in footnote 3 on page 8 of the body of Minilec's reply comments should be "EIA/TIA-IS-54-A".

For the Commission's and the parties' convenient reference, I have attached a corrected Appendix to this letter.

Very truly yours,

Kenneth E. Hardman

Kenneth E. Hardman, P.C.

cc: Judith St. Ledger-Roty, Esquire
R. Michael Senkowski, Esquire
Gerald S. McGowan, Esquire
Jeffrey Blumenfeld, Esquire

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APPENDIX

A. Technical Feasibility of a Real-World Voice Paging System Having Features and Methodology of the Type Referred to By Paging Network, Inc., as "VoiceNow"

Minilec Service, Inc. has conducted "real-world" tests in six U.S. cities including Los Angeles, California, involving a cellular voice paging system which utilizes frequency reuse and voice compression technology for the purpose of achieving spectral efficiency. The system additionally utilizes a digital voice storage paging transceiver having two minutes of voice storage capacity and digitally signaled answer back capabilities.

Cell configuration (i.e. N=4, N=7) in the test cities varied depending on terrain, signal propagation, coverage area, etc. Each system in the test cities included a simulcast paging channel, a system answer back receive channel and multiple voice message transmit channels per cell. In order to guarantee radio-link continuity between a designated cell's voice channel and pager transceiver, a Clear Channel Signal (CCS) was transmitted on the designated voice channel allocated to the targeted pager transceiver. Upon verification of the designated voice channel, a compressed voice message was transmitted via the voice channel to the targeted pager transceiver.

Upon receipt by the pager, the compressed voice message was automatically recorded in digital format for replay at

some chosen time by the pager user. After receipt of the voice message, the paging transceiver transmitted a short burst acknowledgement signal to the system receiver, which acknowledged receipt of the message and terminated communication. When acknowledgement was not received, the system would perform a retry routine at specified intervals.

B. Basic Operation and Features of Test System

When a message is to be sent, the caller places a call to the pager user. A personal greeting is played, which was previously recorded in the pagers user's own voice (stored at the message terminal) and a pleasant tone indicates that the caller may begin recording his message. Just like a telephone answering machine, the caller speaks into the phone leaving whatever message he/she would like to send to the pager user. When the caller has completed the message, the system instructs the caller to, "Press one for message delivery confirmation or you may hang up now. Your message will be delivered shortly. Thank you for calling."

Should the caller press one, three additional choices are given. The caller is instructed to press one to have the system return a call to the caller in order to confirm message delivery. The caller is prompted by the system to enter his/her phone number and agree to pay for the confirmation call. The caller may press two for a toll free number. This number may be called by the caller in order to

obtain confirmation, in which case, the caller is given a message ID number. The caller may press three for emergency delivery (via special access code) in which case the caller stays on the line and verbal confirmation is given to the caller in real time via system voice prompts upon delivery. After completion by the caller the system network signals the pager on a wide area simulcast system similar to that shown on Figure 1.

The pager upon receiving a page, sends an acknowledgement on a different channel which is delivered, through network receivers, to the network controller. Based upon location, signal strength, S/N, etc., the controller selects the optimum cell site and voice channel for delivery of the message and sends an assignment command to the pager. Responsive to the assignment command, the pager selects the frequency assigned and verifies proper cell allocation and channel continuity by analyzing a clear channel signal (CCS) having a color code assignment consistent with EIA/TIA-IS-54-A specifications.

After a clear message channel is established between the specified pager and designated cell, the system then, utilizing voice compression techniques and having already established a clear message path with the pager, broadcasts the voice message over the single transmitter. Meanwhile, that channel frequency is reused by other cells in the same metropolitan area to transmit different voice messages.

Should the pager be turned off, not located, or receive errors, the system periodically performs retries on a secondary basis in order to conserve airtime. After the message is received and stored by the pager, the user is automatically alerted to the presence of the message. He/she is then free to listen to the message, save the message, scroll through other messages, and delete messages, all at the user's discretion. After the message is delivered, the system informs the caller that the message was delivered and the date and time of delivery. Optionally, the system informs the caller that the message was not delivered by a specific time or day.

C. Verification of Technology

Frequency Reuse - Minilec Service, Inc. has confirmed that the methodology proposed by Paging Network, Inc. involving frequency reuse in a cellular paging system is feasible utilizing today's technology.

Voice Compression - Minilec Service, Inc. has confirmed that the methodology proposed by PageNet involving voice compression in a cellular paging system is feasible. Utilizing today's technology, time compression ratios of 3:1 were achieved (i.e. 15 second message compressed to 5 seconds) while maintaining modulation mask requirements. Higher compression rates utilizing digital modulation is theoretically possible.

Dynamic Channel Reallocation - Minilec Service, Inc. did not test the methodology proposed by PageNet involving dynamic channel reallocation, therefore it cannot confirm or deny the performance of such an arrangement. Minilec Service, Inc. is, however, aware of similar reallocation schemes utilized by cellular telephone carriers in areas of fluctuating traffic conditions. Minilec believes that the concept of dynamic channel allocation is technically feasible based on current technology.