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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Magalie Roman Salas, Esq.
Secretary
Federal Communications Commission
1919 M Street, NW, Room 222
Washington, DC 20554

RE: Petition for Issuance of Erratum/Petition for Reconsideration to First Report and Order, Further Notice of Proposed Rulemaking, PR Docket No. 92-235

Dear Ms. Salas:

Enclosed herein are an original and six copies of the above referenced petition. Please time stamp one of the copies provided and return it to me. For your convenience, I have enclosed a self addressed stamped return envelope.

If you have any questions, please contact the undersigned.

Respectfully submitted,

Dr. Lars-Goran Larsson
Director, Standards and Regulations

cc: Daniel Phythyon, Esq.
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**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.**

In the Matter of

Replacement of Part 90 by Part 88 to Revise)
the Private Land Mobile Radio Services and)
Modify the Policies Governing Them)

and)

Examination of Exclusivity and Frequency)
Assignments Policies of the Private Land)
Mobile Services)

PR Docket No. 92-235

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

To: The Commission

**Petition for Issuance of Erratum
or
Petition for Reconsideration
by Ericsson, Inc.
to the
*Report & Order and Further Notice of Proposed Rule Making***

Ericsson, Inc. (Ericsson) respectfully requests that the Commission revise its current spectrum efficiency requirements for type acceptance of digital radio equipment, either through issuance of an Erratum or Reconsideration Order, to standardize the efficiency standards for voice

and data equipment designed to operate at 12.5 kHz bandwidth. Under the requirements now published in the Code of Federal Regulations, voice equipment must today meet an equivalent 2:1 improvement in spectrum efficiency as compared to 25 kHz bandwidth equipment; but, data equipment must meet an equivalent 4:1 improvement in spectrum efficiency as compared to 25 kHz bandwidth equipment. Voice equipment is not required to meet the 4:1 improvement in efficiency until 2005.

Ericsson recognizes that this request is not timely filed, but because of the importance of the Commission's decision in this matter to the type acceptance of equipment now being designed, Ericsson requests that the Commission nevertheless consider this Petition.

Background

Ericsson is recognized as an international leader in the telecommunications industry with 85,000 employees worldwide and business partnerships in more than 100 countries. It is highly active in research and development and generated over \$20 billion in net sales in 1996. Approximately 40 percent of the world's mobile telephone subscribers are connected to Ericsson-supplied systems.

Ericsson's presence in the United States dates back to the turn of the century. In 1989, Ericsson and General Electric formed a joint venture named Ericsson GE Mobile Communications Inc. (EGE). In 1996, the EGE name was formally changed to Ericsson Inc. Ericsson Inc. (USA) is headquartered in Richardson, Texas, and employs approximately 7,000 in the United States. Ericsson Inc.'s private land mobile manufacturing operations are located in Lynchburg, Virginia.

Ericsson has been an active participant in the Commission's "Refarming" proceeding from

its inception. In that regard, Ericsson offers the Commission its views in the following area.

Spectrum Efficiency Standards

Ericsson believes that because of a shift in Commission policy between the *Notice of Proposed Rule Making (NPRM)* and *First Report & Order and Further Notice of Proposed Rule Making (R&O and FNPRM)*, in this proceeding, the year 2005 spectrum efficiency standard for data equipment was inadvertently applied as of August 1, 1996, which date was subsequently changed to February 14, 1997.¹ In the *NPRM*, the Commission proposed efficiency standards for communications systems based on “communications links” per bandwidth.² At the time of the *NPRM*, the Commission was contemplating a one-step move from “wideband” to “narrowband” technologies. In the *R&O and FNPRM*, however, the Commission adopted a two-step approach, first converting 25.0/30.0 kHz bandwidths to 12.5/15.0 kHz bandwidths in the 1996/97 timeframe; and then in 2005 converting from 12.5/15.0 kHz bandwidths to 6.25/7.5 kHz bandwidths.³ While adopting this two-step process, the Commission continued to define the desired spectrum efficiency for voice equipment in terms of one voice channel per occupied bandwidth. This resulted in a 1996/97 spectrum efficiency requirement of one voice channel per

¹ See, Notice of Proposed Rule Making (NPRM), PR Docket No. 91-170, 6 FCC Rcd 4126 (1991) and First Report and Order and Further Notice of Proposed Rule Making (R&O and FNPRM), PR Docket No. 92-235, 10 FCC Rcd 10076 (1995)

² See, NPRM, Appendix D, Proposed Rules, at Section 88.433. The Commission proposed that new systems would have to meet a standard of one communications link per 5 kHz for the 150-174 and 220-222 MHz bands, and one communications link per 6.25 kHz for the 420-512 MHz band. The proposed section further indicated that a communications link may be either voice or data, and for data, the total required through-put rate is at least *4800 baud times the required number of communications links*.

³ See, R&O and FNPRM at paragraph 97.

12.5 kHz of occupied bandwidth, and one voice channel per 6.25 kHz of occupied bandwidth in 2005. For data equipment, however, the rules the Commission adopted result in an immediate spectrum efficiency requirement of 4800 baud per 6.25 kHz of occupied bandwidth, rather than providing a two-step process consistent with that selected for voice equipment.

If the Commission had adopted consistent approaches for voice and data equipment, the interim spectrum efficiency requirement for data equipment would have been 4800 baud per 12.5 kHz of occupied bandwidth, rather than the requirement of 9600 baud in 12.5 kHz contained in the current rules. The effect is that data equipment must now effectively meet a spectrum efficiency standard of two data channels per 12.5 kHz of occupied bandwidth, while voice equipment must only demonstrate a spectrum efficiency of one voice channel per 12.5 kHz of occupied bandwidth. Based on the record in the proceeding, Ericsson believes that this discrepancy may have been inadvertent.

The Commission could easily correct this discrepancy by issuance of an Erratum. The original *Notice* proposed exactly what Ericsson is now suggesting, so adequate notice of the issue has already been provided. In fact, the opposite may not be true. One could clearly argue there was not and has not been adequate notice for the Commission to immediately require a spectrum efficiency standard of 4800 baud per 6.25 kHz of occupied bandwidth for data equipment. In lieu of an Erratum, the Commission could correct the discrepancy in its next Memorandum Opinion and Order responding to pending Petitions for Reconsideration.

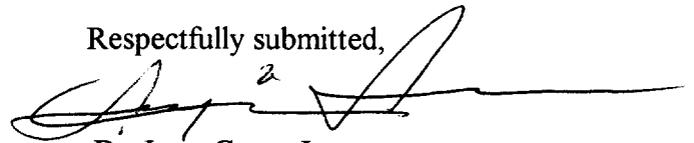
Ericsson proposes that the discrepancy be corrected by revising the last sentence of Section 90.203(j)(3) to read as follows:

“If the equipment is capable of transmitting data, the equipment must be capable of supporting a minimum data rate of 4800 bits per second per 12.5 kHz of bandwidth.”

This minor modification of the Rules and Regulations would make the spectrum efficiency requirements for data equipment consistent with the spectrum efficiency requirements for voice equipment as well as achieving consistency with the determination of spectrum efficiency standards originally articulated in the *NPRM*. The 4800 baud per 6.25 kHz of occupied bandwidth requirement for data equipment would not and should not become effective until January 1, 2005, consistent with the 2005 requirement of one voice channel per 6.25 kHz of occupied bandwidth.

For the foregoing reasons, Ericsson respectfully requests that the Commission revise its rules as described above.

Respectfully submitted,



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DATED: November 12, 1997

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