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YOUNG & JATLOW / FEB 15 1994

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

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February 15, 1994

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

In re: Ex Parte Presentation  
Docket No. 90-314  
The Ericsson Corporation

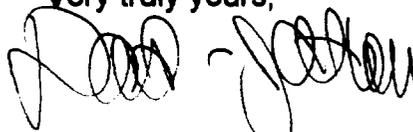
Dear Mr. Caton:

Pursuant to the provisions of Section 1.1206 of the Commission's rules, this letter will serve to advise you that on this date representatives of The Ericsson Corporation met with staff members of the Office of Commissioner Quello to discuss matters related to licensed PCS issues which were previously discussed in Ericsson's formal pleadings in this proceeding.

In addition, copies of this letter are being hand delivered on this date to those staff personnel who attended this meeting.

Should there be any questions with regard to this matter, kindly communicate directly with the undersigned.

Very truly yours,



David C. Jatlow  
Counsel for The Ericsson Corporation

# **AGENDA**

**1. Introduction**

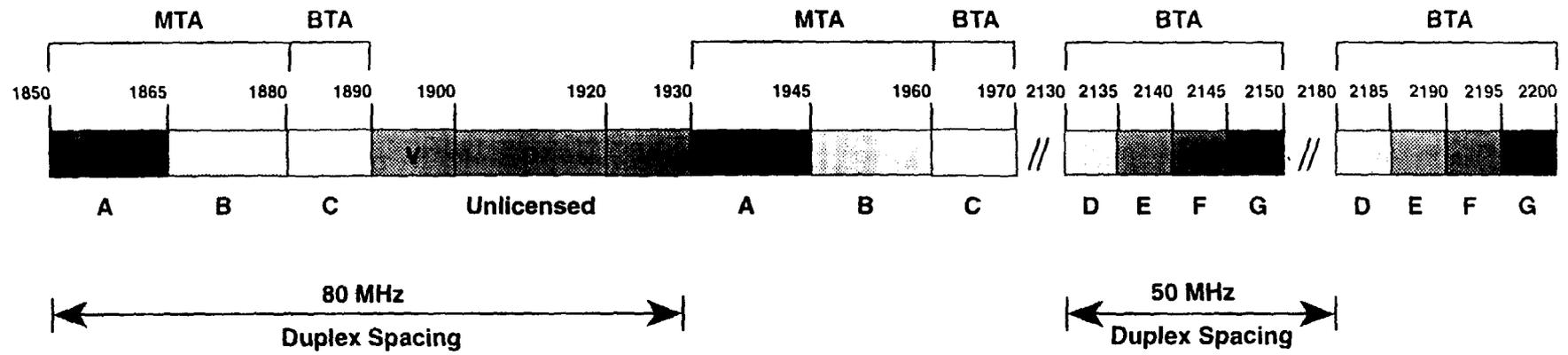
**2. Comments of Ericsson in Response  
to the FCC Notice of Proposed Rule  
Making and Tentative Decision**

**3. Discussions**

## Main Issues

- **Interference issues, 1.8-2.2 GHz**
  - PCS-Microwave, "OK"
  - PCS-PCS (adjacent bands), licensed/unlicensed
  - upband/downband (if FDD)
  
- **Power Levels**
  
- **Conclusions**

# US/PCS Spectrum Allocation



## Recommendation

- **FCC to specify interference limits between PCS bands**
- **FCC to specify upband/downband (if FDD)**
- **FCC to specify power levels that assures; economical deployment of PCS (coverage, low cost/mass market handsets) and "RF hazard limits"**

## **Interference Between Different PCS Bands**

- **Paired frequency bands for licensed PCS**
- **No exclusion of technologies (both TDD and FDD systems is allowed)**
- **Some cases of PCS-PCS interference can cause severe problems for a reliable service unless FCC specifies rules for PCS-PCS interference**

## **FCC should specify;**

- **If FDD technology is used, Upper part of spectrum is BS Transmit, and lower part MS Transmit**
- **The rule 99.234, measured in a spectrum of 1% of the signal bandwidth, and modified if higher BS power is allowed, shall hold between PCS bands as well**
- **Any transmitter (BS or MS) transmitting in the lower spectrum part shall be limited by max MS power (presently 2 W)**

## MS-MS Interference

- **The rule 99.234 is not sufficient to avoid MS-MS interference when a TDD MS operates in the band adjacent to an FDD receiver (Upper band).**
- **Any MS transmitting in the upper band must comply with the unlicensed mask (15.321)**

## **Interference between TDD and FDD BS**

- **The rule 99.234 implies at least  
60-100 meters isolation distance**

## Power Levels - General

- The need for economical coverage requires higher BS power. More than 100 W EIRP
- MS and BS power shall be balanced
- Low power MS is possible to balance, by improved BS antenna performance
- Recommendation of low power MS classes for the urban mass market is desirable.

## BS Power

- **More than 100 W EIRP is required for economic coverage**
- **Compare 160 W EIRP in urban applications and 800 W EIRP in rural applications for the AMPS band**
- **Proposed numbers are in the order 400 - 1600 W EIRP**

## Measurement

- **Measurement Methods for transmit power, EIRP, must be defined**
- **Absolute peak limit as hardlimiting boundary of transmit power. (With emission limitations as per 99.234 and 15.321)**